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PROVINCE OF NOVA SCOTIA

REPORT OF THE

Provincial Tuberculosis Hospitals

NOVA SCOTIA SANATORIUM

AND

POINT EDWARD HOSPITAL

FOR THE YEAR ENDED DECEMBER 31

1969

104-01388/

To His Honour,

THE HONOURABLE VICTOR deB. OLAND

Lieutenant-Governor of Nova Scotia

Sir:

I beg to present herewith the report of the Provincial Tuberculosis Hospitals.

I have the Honour to be

Sir,

Your most obedient servant,

Hon. D. Scott MacNutt
Minister of Public Health

J. S. ROBERTSON, M.D.,D.P.H.

Deputy Minister,

Department of Public Health

Sir:

I have the honour to submit the Eleventh Annual Report of Provincial Tuberculosis Hospitals. This is made up of the Sixty-Fifth Annual Report of the Nova Scotia Sanatorium and the Twenty-First Annual Report of Point Edward Hospital. These reports cover the calendar year, 1969. They are preceded by Table A, a combined statistical report.

Respectfully submitted,

H.B. COLFORD, M.D.,M.P.H.

Acting Administrator

Tuberculosis Control Services

CONTENTS

	PAPER COLOR
TABLE A	WHITE
NOVA SCOTIA SANATORIUM	PINK
POINT EDWARD HOSPITAL	GREEN

TABLE A

COMBINED STATISTICAL REPORT

FROM THE NOVA SCOTIA SANATORIUM AND POINT EDWARD HOSPITALS

CONCERNING THE PATIENT POPULATION, EXCLUDING TREATMENT OF SICK STAFF

FOR THE CALENDAR YEAR 1969

	Nova Scotia Sanatorium Est. 1904	Point Edward Hospital Est. 1949	Both Hospitals
Number of patients in residence January 1, 1969	133	64	197
Number of patients admitted as first treatment experience during 1969	297	41	338
Number of patients admitted having had previous treatment for tuberculosis.	143	23	166
Number of patients transferred from another institution	18	6	24
Number of patients admitted to continue treatment (temporarily released).	0	3	3
Number of patients admitted for review or evaluation only	22	52	74
Total admissions during year	319	165	484
Number of patients in residence during year	615	229	844
Number of patients discharged during year	487	192	679
Number of patients in residence December 31, 1969	128	37	165
Number of patient days of hospital care during year	52,887	26,391	79,278

Nova Scotia Sanatorium

Kentville, Nova Scotia

65th
ANNUAL REPORT

Calendar Year 1969

SIXTY-FIFTH ANNUAL REPORT

INCLUDING

MEDICAL SUPPLEMENT

OF THE

NOVA SCOTIA SANATORIUM

FOR THE YEAR ENDING DECEMBER 31, 1969

GENERAL INFORMATION

Free treatment for tuberculous persons in Nova Scotia became effective July 1, 1946. Application for admission of a tuberculous or a suspected tuberculous patient to the Sanatorium is made by the family physician through the Director of the Health Unit of his district recommending further investigation and/or treatment for the patient. If approved, the Director then contacts the office of the Medical Director requesting the admission which is authorized without delay.

The Sanatorium may be reached daily by the Dominion Atlantic Railway. Taxis meet all trains at Kentville, from which it is only a short drive to the Sanatorium. There are good bus connections daily to and from Kentville.

An information pamphlet, "Health Ahead", is available from all Health Unit Directors and from the Sanatorium. Prospective patients should read this before coming forward for admission in order to be informed regarding clothing requirements, visiting hours for friends, and other pertinent matters.

NOVA SCOTIA SANATORIUM

Kentville, N. S.

1969

Honourable Richard A. Donahoe, Q.C.

Minister of Public Health

— ADMINISTRATIVE AND TECHNICAL STAFF —

MEDICAL - FULL TIME STAFF

Helen M. Holden, M.D., C.R.C.P.(C), F.C.C.P.	Medical Director
J. J. Quinlan, M.D., C.R.C.S.(C), F.C.C.P.	Thoracic Surgeon and Bronchoscopist
F. J. Misener, M.D., F.C.C.P.	
A. Laretei, M.D.	Radiologist
Maria Rostocka, M.D.	Physician
*G. A. Kloss, M.D., F.C.C.P.	Physician
E. W. Crosson, M.D.	Physician

MEDICAL - CONSULTING STAFF

V. D. Schaffner, M.D., C.R.C.S.(C), F.A.C.S.	Surgeon
D. M. MacRae, M.D., C.R.C.S.(C), F.C.C.P.	Bronchoscopist
B. F. Miller, M.D., F.R.C.S.(Edin.),F.R.C.S.(Can.)	Consultant in Orthopedics
P. P. George, M.D., M.S.(Psych.) C.R.C.P.(C),	Consultant in Psychiatry
C. E. Jebson, M.D., C.R.C.S.(C),	Consultant in Urology
*D. H. Kirkpatrick, M.D.	Consultant in Anaesthesia
A. M. Sutherland, D.D.S.	Consultant Dentist

ADMINISTRATIVE AND TECHNICAL

R. J. Gerrard, B.Comm.,C.A.	Administrative Assistant (resigned 31.VII.69)
Mrs. Hope M. Mack, R.N.	Director of Nursing (retired 31.XII.69)
Miss E. J. Dobson, R.N., B.Sc.N.	Director of Nursing Services
Mrs. Catherine Boyle, R.N.	Director of Nursing Education
Miss Eileen Quinlan, B.Sc.	Director of Dietary Services
Miss Virginia Allen, B.Sc.	Asst. " " "
Miss Helen Morse, R.T.	Senior Laboratory Technician
D. M. Brown, B.A., B.Ed. M.S.W.	Social Worker and Director of Rehabilitation

* Certified in specialty by Provincial Medical Board

Mrs. Carol LaFontaine, R.T.	Senior X-ray technician (resigned 15.XII.69)
Adi S. Jagosh, R.T.	Chief Technician, Physical Medicine Department
Hector McKean, R.R.L.	Chief Medical Records Librarian

CHAPLAINS:

Rev. Dale MacTavish, B.D., Co-ordinating Protestant Chaplain
Rev. G. E. Saulnier Roman Catholic Chaplain
Rev. J. Douglas Archibald, D.D. United Church chaplain
Rev. W. A. Trueman Anglican Chaplain

Prof. (Rev.) Charles Taylor, B.A., B.D.,(Acadia) S.T.M.(Andover Newton)
Chaplain-Supervisor, Clinical Pastoral Training, Nova Scotia Sanatorium
Associate Professor of Practical Theology, Acadia University

MEDICAL RECORDS COMMITTEE:
Dr. H. M. Holden, Chairman
Mr. A. H. McKean, Secretary
Dr. A. Laretei
Dr. M. Rostocka
Dr. G. A. Kloss
Mrs. Hope Mack, R.N.

TISSUE COMMITTEE:
Dr. G. A. Kloss, Chairman
Dr. F. J. Misener, Vice Chairman
Dr. J. J. Quinlan

PHARMACY COMMITTEE:
Dr. M. Rostocka, Chairman
Mrs. Shirley Maxwell, C.D.C., Secretary
Dr. H. M. Holden
Dr. E. W. Crosson

HOSPITAL INFECTION COMMITTEE:
Dr. J. J. Quinlan, Chairman
Miss V. Skerry, R.N., Secretary
Dr. G. A. Kloss
Miss E. MacQuarrie, R.N.
Miss Helen Morse
Mrs. J. Ells
Charles Sheffield

FIRE PROTECTION COMMITTEE
Dr. H. M. Holden, Chairman
R. J. Gerrard
B. Robinson
Mrs. Hope Mack,R.N.
Miss Eileen Quinlan
Mrs. J. Ells

The Nova Scotia Sanatorium was founded in 1904 and was the first provincially owned and operated sanatorium in Canada. The first medical superintendent, Dr. A. F. Miller, was appointed in 1910 and served in that capacity for a total of 37 years. He is ranked among the great pioneers in the field of tuberculosis. When Dr. Miller retired in 1947, he had achieved a long sought goal of free treatment for tuberculosis in Nova Scotia, this policy having become effective in 1946. He also saw the dawn of a new era, with the discovery and use of the first effective drug in the fight against tuberculosis. Streptomycin was administered to our first patient on February 19, 1947.

Shortly thereafter, Dr. J. E. Hiltz succeeded Dr.Miller. Tragically, this great man was stricken suddenly at the height of his career, when he died on March 22, 1969. Radical changes occurred during the twenty-two years of his tenure, during which time it became possible to visualize the control of tuberculosis. Streptomycin was followed by other effective drugs, advances took place in pulmonary surgery, the death rate from tuberculosis dropped dramatically, and the individual stay in sanatorium decreased considerably. In 1954, Dr. Hiltz had become Director of Tuberculosis Control Services for the Province in addition to his duties at the Sanatorium. Indeed, control of tuberculosis had become a realistic goal, and it is unfortunate that Dr. Hiltz could not have lived to see this goal achieved, not to mention the ultimate dream of eradication. In this regard, it should be pointed out that there are still more than 5,000 cases of tuberculosis reported in Canada per annum, about 200 cases in Nova Scotia,

and that the death rate is still the highest among the communicable diseases in this country. It is readily seen that a formidable task remains for those in the field of tuberculosis.

Following the death of Dr. Hiltz, the year of 1969 proved to be one not only of readjustment but also of accomplishment, as noted in this sixty-fifth annual report.

I was appointed Acting Medical Superintendent and later confirmed as Medical Director. In the meantime, the Tuberculosis Control Services were moved to Halifax. Unfortunately, Mr. R. J. Gerrard, Administrative Assistant at the Sanatorium, resigned on September 1, 1969. It is hoped that a Hospital Administrator will be appointed in 1970, not only for more efficient management of the institution, but also to enable me to concentrate more fully on matters of clinical concern.

The Nova Scotia Sanatorium was again granted accreditation status, following an inspection by Dr. C. J. Doherty, field staff representative of the Canadian Council on Hospital Accreditation. As usual, various recommendations were made, with advice that these be implemented prior to the next survey in 1972, in order to maintain satisfactory standing. Chief among these matters were various items pertaining to fire hazards, including the provision of outside storage facilities for oxygen.

During the calendar year,1969, there was a marked increase in the number of patients treated as compared to the previous year, from 488 patients in 1968 to 615 in 1969 (Table I). This is largely explained by the fact that sick staff members were included in the patient count for the first time. Had this been the case in 1968, the number would have been recorded as 623. Actually, there were ten fewer staff patients

in 1969, so that there was no significant change in the total non staff count. It should be mentioned that "staff" patients were composed mainly of affiliate student nurses and student nursing assistants who became ill with a number of miscellaneous conditions.

With a similar adjustment, it is found that the number of treatment days increased by 4.5% or 2,254 to a total of 52,317 days. The number of patient days, devoted to persons having tuberculosis, increased from 45,059 in 1968 to 47,734 in 1969. The figures indicate that the increase in total patient days represents an increase in service to patients with tuberculosis. At the end of the year, there were five fewer patients in residence (128) as compared with December 31, 1968 (133). (Table I)

Admissions comprised a total of 482 patients. Of this group, 299 (62%) were first admissions, while 161 patients (33%) had undergone previous periods of treatment. As a matter of fact, eighteen members of this latter group were transferred from other treatment centres. As in other years, a number of patients were admitted for evaluation or review of their cases -- for example, in order to determine whether or not a period of treatment was required. In 1969, these patients numbered 22 (5%), and six of the group required treatment, while sixteen were classified as having inactive disease (Tables II & III b).

Four hundred and sixty-five patients were discharged during the year 1969 and, excluding the 22 review cases, 221 (48%) patients suffered from tuberculosis in some form (Table III a). These patients accounted for more than 90% of the patient days of service, though comprising slightly less than half the patient total. It is clearly

evident, therefore, that the vast majority of beds were occupied at any one time by patients with tuberculosis.

These patients with pulmonary tuberculosis outnumbered those with extrapulmonary disease in a proportion of 16 : 1 (208 : 13). This latter group included cases of bone and joint, kidney, glandular disease, etc. In some instances, there was a combination of pulmonary disease with one or more of these conditions (Table III).

The nontuberculous patients exhibited considerable variety in diagnosis (Table IV a), including bronchial asthma, bronchiectasis, bronchitis, cancer of the lung, cystic disease of the lung, sarcoidosis, and pneumonia. Some of these conditions also existed as complications in known cases of tuberculosis (Table III a).

It is interesting to note that there were nine cases of sarcoidosis -- this condition seems to be on the increase in Nova Scotia.

It must be emphasized that many of the nontuberculous cases were referred to the sanatorium as tuberculosis suspects, while some were referred for diagnosis of obscure chest conditions of possible tuberculous origin. Others were admitted for specific treatment or investigation of previously diagnosed conditions, owing to the specialized services available at the Sanatorium. These last named cases included acute chest trauma, spontaneous pneumothorax and acute respiratory failure. The nontuberculous patients included all age groups (Table IV b). Unlike the tuberculous, the female sex predominated, but this is due to the inclusion of student nurses and nursing assistants in the figures. Four nontuberculous cases died at the Sanatorium (Table IV b).

The vast majority of the nontuberculous cases were referred from the Fundy Health Unit (Table IV d). This is readily understandable as the Sanatorium is situated within the boundaries of that Health Unit.

Returning to the tuberculous patients, discharged within the year 1969, and excluding the review cases, it is noted that 20 of these 221 cases died, and six were classified as unimproved (Table V).

Of the twenty deaths, only eight were attributable to tuberculosis. Five were due to cardiac disorders, four to cancer, two to cerebrovascular accidents, and one to pulmonary insufficiency. Considering the larger number of older patients, it is not surprising that a considerable proportion of deaths was attributable to these other disease states. As a corollary, it should be pointed out that the tuberculous patient of this generation rarely succumbs to tuberculosis itself, but rather, lives on to die of some other illness, thanks to the effective treatment of today.

Referring to the six patients who were classified as unimproved on discharge, two of these individuals returned later to resume treatment. A third case failed to return after an extended summer pass, a fourth was an elderly male patient with advanced malignant disease, and two patients in this group departed against medical advice.

Altogether, eighteen patients left against medical advice, or were discharged for disciplinary reasons (Table VI). This represents 9.4% of the discharged tuberculous individuals. This type of discharge still constitutes a problem. However, the disease was considered to be relatively stable in fifteen instances. It is hoped that adequate care and supervision has been possible at home, so that progress can

be maintained. In the remaining three patients, the disease was still unstable. Two of these were subsequently admitted to Point Edward Hospital, while the third one left the Province.

As in previous years, it was discouraging to find that the majority of patients arrived at the Sanatorium in an advanced stage of their illness. Of 45 first admissions, 32 (71%) suffered from advanced disease. Only 13 (29%) were in the minimal or early stage of the disease. As to the readmissions, 70% suffered from advanced disease.

As the average length of sanatorium stay is dependent to a considerable degree on the extent of disease at the time of admission or readmission, earlier diagnosis tends to shorten the period of in-patient treatment. However, it is difficult to predict the response to therapy, and there is truly no average case of tuberculosis. In some, quite dramatic results are achieved, while in other seemingly similar cases treatment must be far more prolonged. Bacterial sensitivity to the various drugs is another major factor in determining the prognosis in a given case.

Average lengths of stay were calculated for those patients who completed a single period of treatment in 1968 and 1969. There was considerable variation in all diagnostic groups (Table VII b). The overall stay varied from 89 to 817 days in 1968, and from 62 to 935 days in 1969. Eliminating the shortest and longest stays, the range would be from 142 to 556 days in 1968, as compared with 66 to 719 in 1969.

Response to treatment was the chief factor in determining the length of stay. However, availability of treatment at home, economic and social factors, and co-existent disease also had some bearing on the matter. Based on the 1968-69 experience, a new case in the minimal

stage should expect to receive six to seven months in-hospital treatment, while moderately and far advanced cases would require nine to ten months and fifteen to sixteen months respectively.

So far as therapy was concerned in 1969, the typical patient was placed under treatment with a regimen of the three so-called first line drugs; namely, Streptomycin, Paraminosalicylic acid in one of its forms (PAS), and Isonicotinic acid hydrazide (INH). Unfortunately, there was a contraindication to the use of one of these drugs in six of 96 first treatment cases whose treatment was completed in 1968 and 1969 (Table VII c). In ten cases, one or more of the second line drugs was combined with one or more of the first line drugs -- or used subsequently. These drugs include cycloserine, ethionamide, pyrazinamide, capreomycin, and ethambutol. Capreomycin is still being used on a clinical trial basis, while ethambutol may well succeed to the first line group of therapeutic agents. Its chief toxic effects involve the optic nerve, necessitating frequent monitoring of visual acuity, colour vision, peripheral vision and fundoscopic appearance. In addition to these first and second line drugs, our institution was privileged to join a country-wide investigational project with regard to Rifampin (Rifampicin), a therapeutic agent recently introduced into this country for research purposes only. Our first patient commenced this medication on December 3, 1969, and meaningful results should be available for the 1970 Annual Report. Rifampin is an oral drug and encouraging results have been reported from various European countries.

In early disease, drug treatment alone will frequently suffice, but as the disease becomes more advanced, there is a greater chance that surgical intervention will be indicated.

As to groupings by age, one quarter (25%) of those patients discharged for the first time in 1969 were 60 years of age or older, whereas one half (50%) were 50 years of age or older (Table VIII a).

On December 31, 1969, about one half the patients in residence had far advanced tuberculosis (Table VIII b). Nineteen (16%) were in the 60 - 69 year age group, twenty-one (18%) in the 70 - 79 year age group, while five patients were 80 years of age or older. Sixty-eight (57%) were more than fifty.

The religious affiliation of the patients discharged is noted in Table IX, members of the Roman Catholic faith comprising 36% of the total. The Anglican, Baptist, and United Church included 50% of the total, while the remaining 14% belonged to various smaller religious bodies (Table IX).

With regard to residence, seventy (30%) of the tuberculous patients discharged during the year came from Halifax County (including the cities of Halifax and Dartmouth) (Table X). Actually, all counties, except Queens, were represented by discharged patients during the year 1969. Kings County, with 37 patients (16%) had the second largest number.

Numerous miscellaneous conditions were diagnosed among the tuberculous patients. These included coexistent disease states of both tuberculous and nontuberculous origin (Table III c). Referring to the latter group, one notes a large number of cardiovascular complications in addition to various pulmonary diseases, the last named including chronic bronchitis, emphysema and the pneumonias. Diabetes mellitus of variable severity was fairly frequent.

Our intensive care unit was faced with several emergencies during the year, and two of these entailed the measure of tracheostomy. Needless to say, there is an increased demand for laboratory services during this type of illness, in addition to the specialized medical and nursing care. The full time medical staff has continued to provide care on a 24-hour basis, seven days a week, supplemented by consultant psychiatric, urological and other services when required.

Psychiatric services have been provided through the facilities of the Fundy Mental Health Unit. Psychiatric complications proved quite numerous (Table XIV E).

At this point, it seems appropriate to express a word of sincere thanks to Dr. Eric Cleveland, Medical Director of the Fundy Mental Health Unit, for his service to the Nova Scotia Sanatorium throughout the 14-year period from 1955 to 1969. He has been succeeded by Dr. F. F. George of that Clinic as consultant psychiatrist.

Medical projects have included continuation of the bentonite serological studies in conjunction with Dr. B. B. Diena of the Department of National Health and Welfare in Ottawa, co-operation with Dr. Paul Landrigan of the Victoria General Hospital in Halifax in research regarding the incidence of aspergillosis in this province, and continuation of special studies related to sarcoidosis. In addition, extensive differential tuberculin testing has been continued, as well as our study related to mycobacteriosis. We also carried out extensive testing with regard to new antigens, in co-operation with the Connaught Medical Research Laboratories. As noted earlier in this report, the Sanatorium joined a nation-wide research study regarding the new drug, Rifampin, used in combination with Ethambutol.

With regard to Surgical Procedures, fifty pulmonary resections

were performed (Table XI A). Of these operations, 28 were done in cases of tuberculosis, while the remaining 22 patients presented varying diagnoses including bronchiectasis, carcinoma and emphysema. Indeed, many of this latter group underwent surgery for diagnostic purposes. So far as resections for tuberculosis are concerned, there were no pneumonectomies. Wedge, segmental resection and lobectomies were performed, sometimes in combination. Surgical intervention was necessitated in twenty-five (27%) of the first treatment cases (Table XI B).

There was a variety of sundry surgical procedures (Table XI C & D). Among the major group are included several urological operations.

The department of radiology showed an increase in work volume, with a total of 8557 interpretations compared to 7985 in the previous year (Table XII). Although all categories show an increase, the most marked difference was found in the number of survey films submitted by the Atlantic Health Unit.

There was a decrease in the film developing service as carried out for the Department of Public Health -- 10,665 in 1968 to 9,106 films in 1969 -- and this difference is mainly explained by the fact that the Western Health Unit can now obtain faster service, locally.

The laboratory services increased during the year 1969. Not only was there an increase within our own laboratory, but also more specimens were submitted to the Provincial Laboratories in Halifax, and to the Red Cross. However, our Department of Milk and Water Analysis showed a decrease from 13,527 units in 1968 to 12,618 units in 1969 (Table XIII). The work in the General Laboratory increased from 94,953 in 1968 to 97,798 units in 1969, exclusive of blood gas analysis which was performed on 240 occasions, bringing the total to 98,998 units (Table XIV D).

This increased work load has occurred in spite of the introduction of the autoanalyzer into the Provincial Laboratory in Halifax -- a service from which we have benefited considerably -- and we do appreciate the fact that it has been made available to us. An evergrowing proportion of diagnostic problems, together with special drug studies, and other projects, accounts for the overall increase in work units.

In addition, a considerable work load (not included in the unit count) is associated with the shipping of specimens elsewhere. For example, special sputum isolates are forwarded to the National Reference Centre for Tuberculosis in Ottawa, and subcultures of atypical mycobacteria to the Public Health Laboratories both in Nova Scotia and in Ontario. These examinations are valuable in themselves and also assist in maintaining a high standard of quality control in our own laboratory.

Special quality control studies are carried out periodically in conjunction with the Nova Scotia Hospital Insurance Commission. These entail all facets of laboratory work and we do appreciate the opportunity of benefiting from this continuing project.

We wish also to acknowledge the assistance of Dr. Kerenyi and Dr. van Rooyen, and the members of their staffs, in providing the specialized services of their departments.

There was no significant change in the organization nor work load of the Out-Patient Department. Regular clinics were held on a referred appointment basis on Tuesday and Wednesday afternoons and Saturday mornings. Emergency referrals were arranged at other times. Only one new active case of tuberculosis was discovered during the year out of a total of 3319 examinations (Table XIV A). Seventy-five BCG vaccinations

were done and allergy testing was done in several cases of bronchial asthma and related disorders. This latter service is restricted to cases of respiratory allergy. Our clinic has continued to be responsible for the follow-up management of tuberculous veterans from mainland Nova Scotia, apart from the metropolitan Halifax area.

Having been without a dentist for a temporary period, we were fortunate in obtaining the services of Dr. A. M. Sutherland who joined our staff on a part time basis. The numerous procedures performed in the dental clinic indicate the pressing need for this service (Table XIV F). Free service is provided to our patients insofar as essential dental care is concerned, while artificial dentures can be purchased at the cost of technological services.

The Department of Physical Medicine showed an increase in work volume from 18,117 in 1968 to 19,672 treatments in 1969. The number of intermittent positive pressure treatments almost doubled -- from 3647 in 1968 to 7085 in 1969 — averaging 25 treatments daily on the basis of a six-day week. This increase reflects the increasing number of patients with chronic obstructive pulmonary disease (see also comments re blood gas analysis, page 14). There was a slight decrease in the other measures of treatment provided by this department (Table XIV C).

In the Nursing Department, it was with deep regret that we bade farewell to Mrs. Hope Mack, R.N., on her retirement which took effect on December 31, 1969. Mrs. Mack had served as Director of Nursing Services from 1930-1944, and again from 1959-1969. She was succeeded by Miss E. J. Dobson, R.N., B.Sc.N., on January 1, 1970. Miss Dobson had rejoined our staff as Director of Nursing Services in May, 1969, having completed

post-graduate studies at Mount Saint Vincent University, where she had just received her B.Sc.N. degree cum laude. We are fortunate in having such a worthy successor to Mrs. Mack. Other retirements included Miss Floris Smith, R.N., and Mr. Ernest Boudreau, R.N. Miss Smith had transferred from Roseway Hospital in 1961, and Mr. Boudreau joined our staff in 1946. Miss Frances Jess, R.N., retired after 33 years of service on our casual staff, and Mrs. Lilah Bird, CNA, also retired, having served for 10 years.

On January 1, 1969, the Nova Scotia Sanatorium converted to the metric system. The main burden of this change involved the nursing service and at first glance one does not realize the magnitude of such a move. Not only are the old measures of grain, dram, and ounce replaced by grams and centimeters, but the temperature is registered on the Centigrade scale, patients' weights and heights are designated in kilograms and centimeters respectively and one must not forget the intricacies of the 24 hour clock. In other words, a whole new process of thinking is involved, to say nothing of changes in equipment.

The Ward Procedure Books and Policy Books underwent revision and up-dating -- a continuing process.

The number of registered nurses remained relatively constant throughout the year and was somewhat below complement. It was possible to provide 75% coverage with additional casual staff. The number of certified nursing assistants remained up to complement, vacancies being filled by graduates of our own school.

The In-Service Education program has been very active. A four-week orientation program was provided for new staff members. This included rotation through various departments, including the operating

room, recovery room, intensive care unit, and physical medicine department. Similar programs were arranged for permanent staff members. Regular monthly meetings were held for educational purposes including the showing of film strips, demonstrations with regard to new equipment, and refresher courses with respect to old procedures. On occasions there was a guest speaker. Fire prevention is a frequent topic for discussion.

The Nursing Education Department was fully staffed throughout the year, owing to the fact that Mrs. Phyllis Prest, R.N., served on the teaching staff until Miss Doris Neily, R.N., B.Sc.N., returned in May, 1969, having obtained her degree from St. Francis Xavier University.

There were no postgraduate students in 1969 but there was a total of 244 affiliate student nurses, who undertook the usual four-week program of study at the Sanatorium. Two classes entered the Nova Scotia Sanatorium School for Nursing Assistants during 1969. On December 31, fifty-six students were enrolled. Forty-one students completed the course during the year. Graduation exercises were held in February and September.

Five student nurses from Mount St. Vincent University visited the Sanatorium in April for a day of study, while seven students from Dalhousie University spent two days here in December. We are hopeful that this type of program can be extended in future years, so that a longer period of teaching is possible.

Representatives of the registered nurses, as well as certified nursing assistants, have remained active in their local and provincial associations. Mrs. Hope Mack received an honorary membership in the

Registered Nurses Association of Nova Scotia in appreciation of her time, efforts and continuous service over the years.

The nursing staff of the Sanatorium was represented at various courses and conventions throughout the year (see page 24).

The Dietary Services continued at the usual high level, with no particular changes in staff or routine during the year. A total of 78,487 meal days was divided in a proportion of 52,887 to 25,600 between patients and staff respectively.

Various services are rendered by the Rehabilitation Department. These range through academic education,handcraft instruction, and occupational therapy to social services and recreation.

One notes that general education and handcraft instruction remained on a par with 1968, as tabulated below:

	Individual patients served		
	1967	1968	1969
Academic:			
School age (0-16)	33	26	26
Past school age (17-21)	31	7	4
Adults	6	12	11
New Canadian language	2	0	0
	72	45	41
Business, Industrial, etc.:			
Typing	12	6	3
Arithmetic, bookkeeping, etc.	8	1	1
Sewing	39	87	82
Woodwork	24	.2	0
Watch repair	0	1	1
	83	97	87
Handcrafts:			
A. In Shop:			
Leather	53	20	25
Weaving	3	0	8
Other	12	9	3
B. At bedside:			
Individual instruction	207	176	216
	275	205	252
Grand Total	430	347	380

All academic subjects from I - XII are included in the study program, and these are available to adults as well as to children. Though it is possible to carry out most of the teaching in classrooms, bedside instruction is required in some instances. Fortunately, the three full time teachers are able to provide the individual attention necessary in these cases. Several Visual Aids were purchased during the year and these are of great help to students who have learning problems.

As well as general academic studies, some students have undertaken the General Course, and some adults have tackled the Accelerated Course. Correspondence courses have assumed lesser importance in recent years, partly owing to the increased cost.

The special occupational therapy measures are included in the procedures listed under handcrafts.

Mrs. Eleanor Chase, B.A., M.S.W., joined our staff as Social Worker on July 1, 1969, a vacancy having existed since 1967.

A fourth year student from the Nova Scotia College of Art worked as handcrafts instructor throughout the summer months.

Miss Marguerite MacLeod, Rehabilitation Instructor since 1960, and formerly of Roseway Hospital, retired on September 30, 1969.

The Patients' Library comes under the aegis of the Rehabilitation Department. It remains well stocked in books and periodicals. These are distributed to shelves in the various wards on a rotation basis, as well as being in general circulation from the main library.

The Radio Station, SAN, continues to function but on a lesser scale, owing to the fact that television sets are available in all recreation rooms, and many patients have their own transistor radios, and even

television to some extent. However, the Station continued to provide certain local programs of interest, such as worship services.

The billiard table continued its popularity among our patients.

Concerts and parties took place throughout the year, often sponsored by outside organizations, and their efforts were greatly appreciated. As usual, a picnic was sponsored by the summer group in the Clinical Pastoral Education course. The Walter Callow Veterans and Invalids Welfare League arranged their annual bus drive. Other miscellaneous drives were organized by various groups.

As far as the Christmas season was concerned, many individuals, as well as service clubs and church groups, contributed in various ways. This support from our many friends is appreciated more than one can express in words.

Mrs. MacKinnon, principal teacher, improved her qualifications by summer studies, and the Rehabilitation Department was represented at various meetings and conventions.

In the Chaplaincy Service, the Reverend Dale MacTavish obtained his accreditation as a full Supervisor of Clinical Pastoral Education. He continues to serve on a half-time basis, spending the remainder of his time at the Kings County Hospital. Together with the visiting Protestant Chaplains, a well organized visitation program was provided, and it was anticipated that the Reverend Gerald Saulnier would receive the appointment of Roman Catholic Chaplain early in 1970. Students in the Clinical Pastoral Education courses continued to extend the visitation program. These included, not only those attending Acadia University during the academic year, and the regular summer group, but

also a new group of postgraduate students who commenced their studies at Acadia University in September 1969.

Worship services were conducted regularly in the Sanatorium Chapel, as well as daily vesper services on Station SAN.

The list of students, from all denominational backgrounds, who attended the six-week summer course in Clinical Pastoral Education is as follows:

Rev. Stephen Adkins	St. John's, Nfld.
Rev. David B. Wilton	Upper Canard, Kings Co.
Rev. Keith A. Crouse	Mahone Bay
Rev. Donald E. Robertson	Digby
Rev. Robert Horton Coote	Mahone Bay
Rev. Ralph A. Billard	Dark Cove, Nfld.
Rev. Albert N. Marshall	New Ross
Lic. Gary Tonks	Summerville, Hants Co.
Lic. George Allaby	Wolfville
Lic. Harold H. Price	Kentville
Lic. Allan Jorgensen	Wolfville
Lic. David P. Dawson	Wolfville

* * * * * * * * * *

The following papers, including one not noted in a previous annual report, were published during the year by members of the staff of the Nova Scotia Sanatorium:

1. "Lactation following Thoracotomy" - Dr. J. J. Quinlan, Canadian Journal of Surgery, January 1968.
2. "An Epidemic of Tuberculosis in A Rural High School in 1967" - Drs. V. K. Rideout and J. E. Hiltz, Canadian Journal of Public Health, January, 1969.
3. "Bronchospirometry" - Drs. J. J. Quinlan, G.A. Kloss, and F. J. Misener, Nova Scotia Medical Bulletin, February, 1969.
4. "A Note on the Tuberculin Test and Tuberculin Testing" - Dr. J. E. Hiltz, Nova Scotia Medical Bulletin, June, 1969.

5. "Breast Cancer following Multiple Fluoroscopies during Artificial Pneumothorax Treatment of Pulmonary Tuberculosis" - Drs. J. A. Myrden and J. E. Hiltz, Canadian Medical Association Journal, June, 1969.

PROFESSIONAL EDUCATION:

The Medical Director attended the National Tuberculosis Conference held in Ottawa in October, 1969, under the joint auspices of the Department of National Health and Welfare and the Canadian Tb. and RD Association. She also attended the annual meeting of the Canadian Public Health Association held in Halifax in May, as did Donald Brown, Director of Rehabilitation. In February, Dr. Holden participated in a Short Course in Physiology for Practicing Physicians sponsored by Dalhousie University.

Dr. Quinlan attended the annual meeting of the American College of Chest Physicians in Chicago, of which he is a Governor, and in November, took a Postgraduate Course in General Surgery sponsored by the Dalhousie University Department of Continuing Medical Education.

During March, 1969, Dr. Kloss took a Postgraudate Course in Anaesthesia and Clinical Traineeship at the Victoria General Hospital in Halifax.

Dr. Misener participated in a Postgraudate Seminar in "Current Trends in Chest Roentgenology" held in Miami Beach in April.

Dr. Crosson attended a Conference on Respiratory Therapy held in Boston in November, and he also attended the Canadian Tb. and RD Association annual meeting in St. John's, Newfoundland, in June. Other staff members from the Sanatorium attending this meeting were Mrs. Catherine Boyle, R.N., Mr. Donald Brown, and Mr. Hector McKean of our Medical Records Department.

Mrs. Hope Mack, R.N., Director of Nursing, attended the Institute on the Future of Nursing in Nova Scotia in March, as did Mrs. Catherine Boyle, R.N. and Mr. R. J. Gerrard, Administrative Assistant. Mrs. Mack, Mr. Gerrard, and Dr. Holden, attended the Annual Institute of the Atlantic Hospital Association in Halifax.

Other courses and institutes attended by members of the nursing staff were:

Institute of Nursing sponsored by the Dalhousie School of Nursing on "Addiction and Implication for Nursing" - Mrs. Kathleen Dakin, R.N., and Miss Elizabeth MacPhail, R.N.

Symposium on Inhalation Therapy, Victoria General Hospital - Miss Eleanor MacQuarrie, O.R. Supervisor and Miss Sadie Barkhouse, CNA, Department of Physical Medicine.

O.R. Nurses Conference, Halifax - Miss Margaret Potter, R.N.

Again this year, the Civil Service Commission conducted Resident Courses in Supervision, and two of our senior nursing staff, Miss E. Jean Dobson, R.N., and Mrs. Kathleen Dakin, R.N., took part, in May and October, respectively.

In the Dietary Department, our three dietitians, Miss Eileen Quinlan, Miss Virginia Allen, and Mrs. Victoria Dekker, attended various sessions of a Management Workshop sponsored by the Canadian Dietetic Association, which was held at Mount St. Vincent University in June. Miss Laura MacDonald and Mr. Robie Wilson of the dietary staff took a Cooking Course sponsored by the Nova Scotia Institute of Technology.

Our Director of Rehabilitation, Mr. Donald Brown, attended a Hospital Social Work Seminar at the Grace Maternity Hospital in Halifax, and Mrs. Norma Cassidy, Occupational Therapist, travelled to Montreal to attend the Canadian Association of Occupational Therapy Annual Meeting.

Mr. R. J. Gerrard went to the Annual Meeting of the Canadian Hospital Association in Ottawa in May.

Our Co-ordinating Chaplain, Rev. Dale MacTavish, attended the 4th Annual Conference of the Canadian Council for Supervised Pastoral Education held in Winnipeg in December.

In addition to the above, several staff members attended the annual meetings of their respective provincial associations.

MISCELLANEOUS:

The following staff members were retired on superannuation during the year:

1. Mrs. Marion Sheppard, laundress, after 34 years of service
2. Mrs. Hilda Boylan, laundress, after 22 years of service
3. Wylie Munro, housekeeping orderly, 10 years
4. Ernest Boudreau, R.N., after 40 years on the staff, interrupted by 5 years leave of absence for overseas duty during World War II
5. Miss Floris Smith, R.N., after 9½ years at the Sanatorium, following transfer from Roseway Hospital
6. Murray Lee, fireman, retired because of ill health after almost 22 years on the staff
7. Chester Mitchell, housekeeping orderly, 18 years' service
8. William Margeson, shift operator, 10 years' service
9. Miss Marguerite McLeod, teacher, after 9½ years at the Sanatorium following transfer from Roseway Hosp.
10. Oscar Reid, housekeeping orderly, after almost 13 years
11. Archibald Arenburg, laundry worker, after 33 years' service
12. Lilah Bird, C.N.A., 10 years' service
13. Percy Wentzell, housekeeping orderly, retired because of ill health after 18 years' service
14. Mrs. Hope Mack, R.N., following a total of 23 years' service

It would be remiss to end this report without adding a special word of thanks to the various individuals and groups who contributed in so many ways during the year. I would like to mention the I.O.D.E., the Lionettes, and the United Church Men, all of whom sponsored parties for our patients; members of the Rotary Club who provided bus transportation to and from the Apple Blossom Festival parade; the Walter Callow organization; those groups particularly active during the Christmas season such as the Canadian Legion, the Kentville Rotary Club, the Red Cross Society, and the Silver Cross Women, as well as numerous church organizations and carol singers. Many individuals could be added to the list as well. It is hoped that one and all have been thanked by letter or in Health Rays -- in any event, their efforts are sincerely appreciated.

To Dr. H. B. Colford, the Acting Administrator of Tuberculosis Control Services, I wish to express my special appreciation. To Dr. J. S. Robertson, the Deputy Minister of Health, and the Honourable R. A. Donahoe, Q.C., I extend my personal thanks for the advice and support I received throughout the year.

The Department of Public Works provided the necessary services in connection with the upkeep of our buildings, a not inconsiderable task for which we are most grateful.

I cannot close without acknowledging the outstanding assistance extended to me by my fellow staff members at the Sanatorium -- both technical and administrative during a year that proved sad and difficult for all. To my colleagues on the medical staff I owe a particular

obligation for the manner in which they have rallied around me at all times.

Finally, I thank sincerely the individuals who assisted in the actual compiling of this report.

H. M. Holden, M.D.,C.R.C.P.(C),
Medical Director

July, 1970

STATISTICAL REPORT

FOR THE CALENDAR YEAR ENDING DECMEBER 31, 1969

Table I

	Calendar Year 1967	Calendar Year 1968	Calendar Year 1969
Number of patients discharged since November 30, 1904	12,770	12,996	13,321
Number of patients in residence at first of year	152	127	133
Number of patients admitted during year	253	237	319
Number of patients readmitted* during year	93	102	141
Number of patients readmitted for review during year	15	22	22
Total number of patients treated during year	513	488	615
Number of patients discharged for first time during year	287	226	325
Number of readmitted patients discharged during year	84	108	140
Number of review patients discharged during year	15	21	22
Total number of patients discharged during year	386	355	487
Number of patients in residence on last day of year	127	133	128
Number of patient days treatment	61,445	49,902	52,887
Number of patient days treatment for nontuberculous patients (included above)	5,450	4,843	5,153

* Readmitted means previously treated at the Nova Scotia Sanatorium

Table II — ADMISSIONS DURING YEAR - SOURCE OF PATIENTS
(Dominion Bureau of Statistics Classification)

First admission to any institution	238	216	299
Readmission, previously treated at any tuberculosis institution	92	106	143
Transfer direct from another institution	16	17	18
To continue treatment (temporarily released)	0	0	0
Review only (evaluation - no treatment)	15	22	22
All admissions	361	361	482

Table III a

DIAGNOSIS OF ALL PATIENTS DISCHARGED DURING YEAR

(Review cases are excluded)

	First admissions	Readmissions*
Pulmonary tuberculosis - reinfection type	100 or 30.8%	79 or 56.4%
Pulmonary tuberculosis - primary active	27 or 8.3	2 or 1.4
Pleural tuberculosis	2 or 0.6	
Tuberculosis of elbow	1 or 0.3	
Tuberculosis of hip		1 or 0.7
Tuberculosis of lymph nodes	2 or 0.6	
Tuberculosis of meninges		2 or 1.4
Tuberculosis of spine	1 or 0.3	1 or 0.7
Tuberculosis of urinary tract	3 or 0.9	
Pulmonary disease - nontuberculous	189 or 58.2	55 or 39.3
All discharges	325 or 100%	140 or 100%

Table III b

FINAL PRINCIPAL TUBERCULOSIS DIAGNOSIS
OF REVIEW CASES DISCHARGED DURING THE YEAR

	Active	Quiescent	Inactive
Tuberculosis of Lung:			
Minimal	—	1	3
Moderately advanced	—	—	7
Far advanced	—	—	1
Other Tuberculosis	5		5
All Review Cases	5	1	16

* Previously treated at this institution

Table III c COMPLICATIONS OF PATIENTS DISCHARGED
Calendar Year 1969

(excludes all principal diagnoses shown in Tables IIIa, IIIb, and IVa)

A. Tuberculous conditions:

Bones & Joints, tuberculosis of	
Hip	2
Knee	2
Spine	5
Tibia	1
Wrist	1
*Bronchiectasis	23
*Bronchopleural fistula	3
*Empyema	1
Erythema nodosum	1
Genitourinary system, tuberculosis of	5
Laryngitis	4
Lymphadenitis	2
Meningitis	2
*Middle lobe syndrome	1
*Pleurisy with effusion	10
*Pneumothorax, spontaneous	1
*Tracheobronchitis	7

B. Conditions other than tuberculosis:

*Acidosis, respiratory	2
Acne, vulgaris	1
Anaemia, iron deficiency	18
Aneurysm of aorta CV	2
Arteriosclerosis CV	3
Arthritis, gouty	1
Arthritis, osteo	18
Arthritis, rheumatoid	3
Ascariasis	1
*Asthma, bronchial	3
Atelectasis	1
Atheroma of aorta CV	1
Auricular fibrillation CV	4
*Bronchiectasis	5
*Bronchitis	6
Bursitis	2
Cataract	6
Cerebral-vascular accident CV	2
Cholelithiasis	3
Conjunctivitis	2
*Contusion of lung	2
Cor pulmonale CV	10
*Cyst, pericardial	1
Cystitis, chronic	3
Cystocele	1
Degenerative disc syndrome	1
Dermatitis, generalized	2

Table III c (cont'd)

Diabetes mellitus		17
Diverticulosis of bladder		1
Diverticulosis of colon		1
Dupuytren's contracture		2
Dysmenorrhèa		1
*Embolism, pulmonary		1
*Empyema		2
*Emphysema, generalized of lung		24
Epilepsy		3
Eczema		1
*Fibrosis of lung, cause undetermined		6
Fibrositis, periarticular		1
*Fibrothorax		2
Fracture of ankle		1
Fracture of clavicle		1
Fracture of malleolus		1
Fracture of radius		1
Gynecomastia		2
*Haemopneumothorax		2
Haemorrhoids		5
Hallux vulgaris		2
Heart disease, congenital	CV	1
Heart disease, congestive	CV	3
Heart disease, coronary	CV	26
Heart disease, rheumatic	CV	2
Hernia, femoral		1
Hernia, hiatus		4
Hernia, inguinal		5
Hernia, umbilical		1
Hernia, ventral		1
Herpes zoster		1
Hypertension, essential	CV	2
Hypertensive cardiovascular disease	CV	14
Hypothyroidism		2
Infarction, acute myocardial	CV	2
Kyphosis, dorsal		1
Lipoma		2
Meniere's syndrome		1
Mumps		3
Neoplasm, benign, bladder		1
Neoplasm, benign, skin		3
Neoplasm, malignant, primary of breast		1
Neoplasm, malignant, primary of esophagus		1
*Neoplasm, malignant, primary of lung		3
Neoplasm, malignant, primary of lymph system		2
Neoplasm, malignant, primary of prostate		1
Neoplasm, malignant, primary of rectum		2
Neoplasm, malignant, primary of skin		1
Neoplasm, malignant, secondary liver, primary site unknown		1
Nephrolithiasis		4
Nephrosclerosis, malignant		1

Table III c (cont'd)

Otitis externa	1
Parkinson's syndrome	1
Pectus excavatum	1
Pediculosis capita	4
Periarteritis nodosa	1
Pharyngitis	1
Phlebothrombosis CV	2
* Pleurisy with effusion	4
* Pneumonia, broncho	12
* Pneumonia, lobar	4
* Pneumonitis	16
* Pneumothorax, spontaneous	2
Poisoning, acute food	1
Prostatic hypertrophy	6
Psoriasis	2
Psychiatric conditions:	
Alcoholism	4
Anxiety state	4
Chronic brain syndrome	1
Depression	2
Imbecility	1
Organic brain syndrome	4
Paranoid state	1
Personality disorder	5
Psychosis, undetermined etiology	1
Reactive depression	11
Schizophrenia	7
Situational reaction	2
Sociopathic personality	1
Pyelonephritis	1
*Sarcoidosis	2
Seborrheic keratosis	2
Shoulder-Hand-syndrome	8
*Silicothracosis	1
Syphilis, latent	2
Thrombophlebitis CV	2
Typhoid, carrier state	1
Ulcer, decubitis	2
Ulcer, duodenal	3
Ulcer, gastric	1
Vaginitis, trichomonas	4

* indicates disease of chest other than heart
CV " " of heart and blood vessels

Table IV a NONTUBERCULOUS PATIENTS - DIAGNOSIS ON DISCHARGE

	First Admissions	Readmissions*
Abortion, spontaneous	1	
Abscess, dental	2	
Abscess, lung	5	
Adverse reaction to inoculation	2	
Arthritis, non specific	2	
Aspergillosis		1
Asthma, bronchial	14	4
Bronchiectasis	1	2
Bronchitis, chronic	10	3
Byssinosis	1	
Cat Scratch Fever	1	
Chest pain, etiology undetermined	1	
Common cold	28	11
Conjunctivitis		1
Coronary artery heart disease		2
Cystic disease of lung	12	1
Cystitis	2	2
Dermatitis, undetermined etiology	1	
Dyskinesia, biliary	1	
Dysmenorrhea	1	1
Empyema	1	
Farmer's Lung	1	
Fibrothorax	1	1
Fracture, ribs, multiple	3	1
Fracture, talus		1
Fracture, vertebrae	1	
Gastritis	5	
Haematoma	1	
Hernia, Hiatus	1	
Herpes labialis	1	
Infarction, myocardial	2	
Infection, postoperative	1	
Infectious mononeucleosis	1	
Influenza	3	1
Ingrown toenail		1
Laceration, leg	1	
Laryngitis	1	1
Loeffler's syndrome		1
Low back pain		2
Mastitis		1
Mycobacteriosis due to Runyon Group III organism	1	
Nausea	1	
Neoplasm, malignant, primary cervical area	1	
Neoplasm, malignant, primary lung	10	
Neoplasm, malignant, primary mediastinum	2	
Neoplasm, malignant, secondary lung, primary site not determined	2	

le IV a (cont'd.)

	First Admissions	Readmissions*
Neuralgia	1	
Neurosis, anxiety	1	
Otitis, externa	2	
Parotitis	1	1
Paroxysmal auricular fibrillation	1	
Pharyngitis		1
Pleurisy with effusion	1	
Pleuritis, chronic	1	
Pneumonia, broncho	14	
Pneumonia, lobar	4	
Pneumonitis	5	2
Pyelitis	1	
Regeneration of bone, intercostal	1	
Rheumatic heart disease	1	
Sarcoidosis	9	1
Spontaneous pneumothorax	1	
Syndrome, post-gastrectomy		1
Syndrome, disc		1
Tonsillitis	5	
Tracheitis		2
Tracheobronchitis		1
Tuberculin converter, no demonstrable disease	2	
Ulcer, gastric	1	
Upper respiratory infection	3	7
Urticaria	2	
No evidence of significant disease	6	
Total	189	55

* Previously treated at this institution

Table IV b NONTUBERCULOUS PATIENTS DISCHARGED - Year 1969

Age Group and Sex

	First Admission			Readmissions*
	Male	Female	Both Sexes	Total
0 - 9	1	1	2	0
10 - 19	2	48	50	24
20 - 29	6	30	36	8
30 - 39	9	4	13	3
40 - 49	16	13	29	2
50 - 59	18	5	23	7
60 - 69	13	5	18	7
70 - 79	9	8	17	4
80 +		1	1	
All Ages	74	115	189	55

Table IV c NONTUBERCULOUS PATIENTS DISCHARGED - Year 1969

Condition on Discharge

	First Admissions			Readmissions*
	Male	Female	Both Sexes	Total
Resolved	21	25	46	2
Improved	33	67	100	46
Unchanged	19	21	40	6
Dead	1	2	3	1
Total	74	115	189	55

* Previously treated at this institution

Table IV d NONTUBERCULOUS PATIENTS DISCHARGED - Year 1969

Health Unit referring case

Health Unit	First Admissions	Readmissions*
Atlantic	12	2
Cape Breton North	1	
Cape Breton South	2	
Cobequid	13	1
Fundy	134	50
Lunen-Queens	10	1
Northumberland	11	
Western	6	1
ALL UNITS	189	55

Table V DISCHARGE CONDITIONS OF PATIENTS WITH TUBERCULOSIS - ALL FORMS

(Review cases excluded)

Calendar Year 1969

	First Admissions	Readmissions*
Inactive	54 or 39.7%	53 or 62.4%
Quiescent	18 or 13.2	8 or 9.4
Active Improved	49 or 36.0	13 or 15.3
Active Unimproved	3 or 2.2	3 or 3.5
Dead	12 or 8.8	8 or 9.4
All Discharges	136 or 100%	85 or 100%

* Previously treated at this institution

Table VI

IRREGULAR DISCHARGES

AMERICAN THORACIC SOCIETY FORMULA

Total number of patients discharged Jan. 1 to Dec. 31,1969	487
Total deductions	296
a) Deaths	24
b) Nontb. discharges	240
c) Transfers to other hospitals for continuation of Tb. treatment	10
d) Discharges of patients admitted for observation, diagnostic procedures, special examinations, or follow-up and for whom less than 30 days' hospitalization was anticipated by original intent	22
e) Discharges of court order patients from locked wards	0
Net Tb. discharges	191
Total irregular discharges	18
a) Against medical advice (disease unstable: 2)	15
b) Disciplinary (disease unstable: 1)	3
Per cent irregular discharges 1969 (item 4 ÷ 3 x 100)	9.4%
Per cent irregular discharges 1968	5.9
" " " " 1967	11.2
" " " " 1966	24.2
" " " " 1965	21.1
" " " " 1964	15.5

Table VII a

ADMISSION DIAGNOSIS OF PATIENTS DISCHARGED

(Pulmonary Tuberculosis only)
Review cases excluded

	FIRST ADMISSIONS						READMISSIONS*
	Calendar Year 1969			Fiscal Years ending in			Calendar Year 1969
				1959	1949	1939	
	Male	Female	Total	Total	Total	Total	Total
Primary	14 or 18.9%	13 or 24.5%	27 or 21.3%	2 or 1.1%			2 or 2.5%
Minimal	17 or 23.0	12 or 22.6	29 or 22.8	40 or 21.3	15 or 7.5%	31 or 14.1%	20 or 24.8
Moderately adv.	17 or 23.0	16 or 30.2	33 or 26.0	95 or 50.5	109 or 55.1	65 or 29.7	26 or 32.1
Far advanced	18 or 24.3	11 or 20.8	29 or 22.8	51 or 27.1	74 or 37.4	123 or 56.2	30 or 37.0
Miliary	3 or 4.1	1 or 2.1	4 or 3.1				2 or 2.5
With occupational disease	3 or 4.1		3 or 2.4				1 or 1.2
Not stated**	2 or 2.7		2 or 1.5				
ALL DIAGNOSES	74 or 100%	53 or 100%	127 or 100%	188 or 100%	198 or 100%	219 or 100%	81 or 100%

* Previously treated at this institution
** Stage of disease undetermined because of co-existing bronchogenic carcinoma

Table VII b

LENGTH OF IN-HOSPITAL TREATMENT PERIOD

First Treatment Experience - Discharged on Medical Advice

Calendar Year 1968

Diagnostic Group	Number of Cases	Total Days	Range	Average Days
Minimal	13	2528	89 - 359	194
Mod. advanced	18	6044	183 - 470	336
Far advanced	14	6414	231 - 817	458
All cases	45	14,986	89 - 817	333

Calendar Year 1969

Diagnostic Group	Number of Cases	Total Days	Range	Average Days
Minimal	16	3434	62 - 459	215
Mod. advanced	17	4484	66 - 442	264
Far advanced	15	7132	325 - 935	475
Miliary	3	1089	270 - 493	363
All cases	51	16,139	62 - 935	316

Table VII c

TREATMENT IN HOSPITAL

FIRST TREATMENT EXPERIENCE - DISCHARGED ON MEDICAL ADVICE

Calendar Year 1968

Diagnostic Group	Number of Cases	Chemotherapy			Resectional Therapy	Cortico-steroids
		Triple First Line	Duo First Line	Triple + Second line		
Minimal	13	13			1	
Mod. adv.	18	14		4	4	1
Far adv.	14	12	1	1	6	
All cases	45	39	1	5	11	1

Calendar Year 1969

Diagnostic Group	Number of Cases	Chemotherapy			Resectional Therapy	Cortico-steroids
		Triple First Line	Duo First Line	Triple + Second Line		
Minimal	16	13	2	1	3	1
Mod. adv.	17	15	1	1	7	4
Far adv.	15	10	2	3	4	1
Miliary	3	3				2
All cases	51	41	5	5	14	8

Table VIII a

AGE AT TIME OF ADMISSION OF PATIENTS DISCHARGED DURING 1969

Pulmonary Tuberculosis only - Primary and Reinfection Type

(Review cases excluded)

Age Group	First Admissions						Readmissions* Calendar Year 1969
	Calendar Year 1969			Fiscal Years ending in 1959	1949	1939	
	Male	Female	Total	Total	Total	Total	Total
0 - 9	10	7	17	6	2	0	
10 - 19	4	9	13	22	28	27	2
20 - 29	11	5	16	49	77	114	
30 - 39	5	7	12	33	53	41	3
40 - 49	7	2	9	32	26	16	12
50 - 59	20	9	29	22	10	14	22
60 +	17	14	31	24	2	7	42
ALL AGES	74	53	127	188	198	219	81
Average ages	41.9	40.5	41.3	37.0	30.8	30.3	57.6
" " 1968	45.3	31.7	40.3				56.6
" " 1967	42.1	32.9	38.0				52.3

* previously treated at this institution

Table VIII b

AGE GROUP AND PRINCIPAL TUBERCULOSIS DIAGNOSIS
OF PATIENTS IN RESIDENCE

Age Group	December 31, 1969						Dec.31, 1968 Total
	Primary	Minimal	Mod. Advanced	Far Advanced	Other Tuberculosis	Total	
0 - 4	4					4	2
5 - 9	3					3	11
10 - 14	2				1	3	5
15 - 19	1		1	1		3	2
20 - 29		1	5	3	1	10	11
30 - 39			4	3	2	9	10
40 - 49		1	6	11	1	19	13
50 - 59			4	15	4	23	19
60 - 69		1	6	11	1	19	24
70 - 79		2	7	11	1	21	16
80 +		1	2	1	1	5	4
ALL AGES	10	6	35	56	12	119	117

Table IX RELIGION OF PATIENTS DISCHARGED

Tuberculosis - All Forms
(Review cases excluded)

Calendar Year 1969

	First Admissions and Readmissions*
Anglican	42 or 19.0%
Baptist	30 or 13.6
Catholic, Roman	81 or 36.7
Church of Christ	1 or 0.5
Greek Orthodox	2 or 0.9
Hebrew	1 or 0.5
Jehovah Witness	2 or 0.9
Lutheran	1 or 0.5
Methodist	1 or 0.5
Mormon	1 or 0.5
Pentecostal	1 or 0.5
Presbyterian	14 or 6.3
Salvation Army	3 or 1.4
Seventh Day Adventists	1 or 0.5
United Church	38 or 17.2
Not Stated	2 or 0.9
ALL DISCHARGES	221 or 100%

Table X

RESIDENCE OF PATIENTS DISCHARGED

Tuberculosis - All Forms
(Review cases excluded)

Calendar Year 1969

	First Admissions			Readmissions*		
	Male	Female	Total	Male	Female	Total
Annapolis County	1	1	2	2	3	5
Antigonish County	2	2	4		2	2
Cape Breton County	5	4	9	1	1	2
Colchester County	3	4	7		2	2
Cumberland County		1	1	4	1	5
Digby County	6	2	8	2	1	3
Guysborough County		1	1	2		2
Halifax City	16	9	25	2	2	4
Halifax County	18	13	31	6	4	10
Hants County	3	5	8	1	2	3
Inverness County	3		3	1	1	2
Kings County	5	5	10	18	9	27
Lunenburg County	7	4	11	2	2	4
Pictou County	6	2	8	6		6
Queens County						
Richmond County				2		2
Shelburne County	2		2	3	1	4
Victoria County		1	1			
Yarmouth County	2	3	5	1	1	2
TOTAL	79	57	136	53	32	85

* Previously treated at this institution

Table XI

SURGICAL PROCEDURES

Calendar Year 1969

A. Pulmonary Resection 50

Indications: (including biopsy* for diagnostic purposes)

Bronchiectasis	3
Carcinoma, bronchogenic	9
Emphysema	5
Loeffler's syndrome	1*
Mycotic infection	1*
Sarcoidosis	3*
Tuberculosis	28

For Pulmonary Tuberculosis: Type of operation

Bilobectomy and segmentectomy	1
Lobectomy and segmentectomy	1
Lobectomy	7
Multiple segmentectomy	7
Segmentectomy plus wedge resection	1
Segmentectomy	6
Wedge resection	5

Operative Mortality (within 60 days) 0.0%**

** Based on tuberculosis cases only

Table XI B

RESECTIONAL THERAPY ON PATIENTS DISCHARGED

Pulmonary Tuberculosis only - according to extent of disease

FIRST ADMISSIONS

Extent of Disease	Calendar Year 1969			1968	1967	1966	1965
	Male	Female	Total	Total	Total	Total	Total
Minimal	3 or 18%	3 or 25%	6 or 21%	3 or 11%	8 or 27%	8 or 27%	9 or 27%
Moderately advanced	9 or 53	6 or 37	15 or 45	10 or 32	12 or 26	15 or 30	24 or 49
Far advanced	3 or 17	1 or 9	4 or 14	8 or 27	10 or 27	14 or 38	9 or 29
Total	15 or 29%	10 or 26%	25 or 27%	21 or 24%	30 or 27%	37 or 32%	42 or 37%
Bilateral operations	1	0	1	2	1	1	2

READMISSIONS*

Extent of Disease	Calendar Year 1969			1968	1967	1966	1965
	Male	Female	Total	Total	Total	Total	Total
Minimal				1 or 6%	1 or 14%	3 or 20%	2 or 13%
Moderately advanced				2 or 7	4 or 23	5 or 22	4 or 13
Far advanced	1 or 5%	1 or 9%	2 or 7%	3 or 10	4 or 29		2 or 13
Total	1 or 2%	1 or 3%	2 or 3%	6 or 8%	9 or 24%	8 or 15%	8 or 12%
Bilateral operations	0	0	0	0	1	0	0

* Previously treated at this institution

Table XI

C. Sundry Surgical Procedures - Major:

Delivery, obstetrical	1
Exploration of kidney	1
Gastrectomy	1
Herniorrhaphy	1
Nephrectomy	1
Nephroureterectomy	2
Prostatectomy, suprapubic	1
Rib resection and drainage of empyema	1
Transurethral resection of prostate	2

D. Sundry Surgical Procedures - Minor:

Aspiration, pleural fluid	33
Aspiration, joint	6
Biopsy, breast	1
Biopsy, cervical gland	2
Biopsy, lip	1
Biopsy, pleural tissue	10
Biopsy, rectum	1
Biopsy, scalene node	13
Biopsy, skin	10
Cauterization	
Excision of skin lesion	26
Incision and drainage of abscess	3
Probing incision	3
Removal of plaster cast	3
Thoracotomy	7
Thoracoscopy	1
Tracheostomy	2
Unguectomy	12

E. Anaesthesia

Nitrous oxide + halothane	1
Nitrous oxide + ether + oxygen	1
Novocaine 2%	136
Pentothal sodium	5
Pentothal sodium + novocaine	2
Pentothal sodium + halothane	1
Pentothal sodium + nitrous oxide + halothane	21
Pentothal sodium + nitrous oxide + oxygen + halothane	15
Pentothal sodium + ether + oxygen	12
Pentothal sodium + ether + cyclopropane + oxygen	9
Pontocaine 2% topical	264

Table XII X-RAY DEPARTMENT REPORT

Abdominal, flat film	21
Barium enema	15
Bones & Joints	281
Bronchograms	59
Bronchospirometry	2
Chest	4916
Cystograms	4
Dental	20
Fistula contrast media	3
Gall Bladder	5
Gastrointestinal	25
Kidney-Ureter-Bladder	31
Oesophagus	3
Outside films interpreted	3062
- interpreted for Director of Atlantic Health Unit	2049
- others	1013
Planigrams	93
Sinus and Mastoid	17
Total	8557

3243 Outpatient x-ray examinations included in above table.

Film developing service for Department of Public Health:

Cobequid Health Unit	5514
Fundy Health Unit	1447
Lunenburg-Queens Health Unit	400
Northumberland Health Unit	1577
Western Health Unit	168
All Units	9106

Table XIII LABORATORY REPORT

Units of work performed:	1969	1968	1967
General laboratory	97,798	94,953	94,359
Milk and Water Laboratory	12,618	13,527	11,661
Total Units performed in Nova Scotia Sanatorium Laboratory	110,416	108,480	106,020
Units of work performed for the Sanatorium by Public Health, Red Cross, and Biochemistry Laboratories, Halifax	16,989	14,667	17,121
Units of work performed for the Sanatorium by: Pathology Laboratory, Halifax	1,264*	1,432	1,616
Blanchard-Fraser Memorial Hospital Laboratory, Kentville	71	80	158
Total Units of Work for Sanatorium specimens	128,740	124,659	124,915

* Surgical and autopsy specimens rated at 8 units of work for each 151 operative specimens plus 7 complete autopsies.

Bacteriology:	
Acid-fast bacilli cultures for identification	8
Atypical mycobacteria for identification	14
Atypical mycobacteria sub-culture	239
Bronchoscopic specimens for tubercle bacilli:	
Concentrated cultures	246
Cerebrospinal fluid specimens for tubercle bacilli:	
Direct cultures	10
Direct smears	2
Gastric lavages for tubercle bacilli:	
Concentrated cultures	1028
Concentrated smears	233
Miscellaneous specimens for tubercle bacilli:	
Concentrated cultures	223
Concentrated smears	115
Direct cultures	161
Direct smears	78
Niacin testing	188
Nitrate Reduction for tubercle bacilli	22
Sputum specimens for tubercle bacilli:	
Concentrated cultures	4086
Concentrated smears	1536
Tubercle bacilli sensitivities	202

Table XIII (cont'd.)

Urines for tubercle bacilli:	
Concentrated cultures	906
Concentrated smears	415
Secondary Organisms:	
Blood cultures	13
Cerebrospinal fluid cultures	2
Environmental swabs	54
Fungi cultures	28
General antibiotic sensitivity tests	244
Miscellaneous cultures	493
Miscellaneous smears	6
Sputum	647
Sterilities	152
Stool	1
Throat and nose	2064
Urine	228
Biochemistry:	
Bromsulphalein	160
Collections	2687
Creatinine, blood	28
Glucose	1666
Glucose tolerance	14
Fat globules, sputum slide	2
Ictotest, serum	23
Non Protein Nitrogen	3
Thymol Turbidity	3
Total Protein, A/G Ratio	73
Urea Nitrogen	643
Van den Bergh	32
Cytology collections	468
Cerebrospinal Fluid:	
Cell Count	3
Chlorides	2
Protein	3
Sugar	2
Faeces:	
Occult Blood	87
Ova and Parasites concentrated	26
Ova and Parasites slide	2
Urobilin	17

Table XIII (cont'd.)

Haematology:

Collections	591
Differential counts	1963
Eosinophils, Bronchoscopic specimens	5
Eosinophils, nasal swabs	33
Eosinophil counts	1
Hematocrits	1952
Hemoglobin estimations	2431
Ictotest	3
L. E. Cells	18
Mono Test	29
Partial Thromboplastin Time	13
Platelet counts	31
Prothrombins	64
Red Blood Cell count	9
Reticulocyte count	16
Sedimentation Rates	1952
White Blood Cell count	2483

Milk and Water Examinations:

Samples tested for coliform organisms:

Chocolate Dairy Drink	95
Cream	127
Ice Cream	20
Ice Cream Mix	36
Milks	426
Total dairy products	704
Water	1622

Samples tested for phosphatase:

Chocolate Dairy Drink	69
Cream	84
Ice Cream	18
Ice Cream Mix	32
Milks	301
Total Phosphatase tests	504

Other tests;

Plate Counts, milk	81
restaurant	807
Resazurins	19

Pleural Fluid:

Hemoglobin	1
Specific Gravity	2
Total Protein	1

Serology:

Collections	295

Table XIII (cont'd.)

Urines:

Individual constituents	337
Routine urinalysis	2367
Trichomonas smears	39
Urobilinogen	16

Tests Performed in the Biochemistry Department, V. G. Hospital:

Blood and urine specimens:

Amylase	3
Acid Phosphatase	4
Alkaline Phosphatase	50
Bicarbonate	89
Biochemical profile	250
Calcium	28
Chlorides	89
Cholesterol	29
Electrophoresis, protein differential	23
17 Keto-Steroids	3
17 OH-corticoids	26
Other urinary hormones	0
Salicylates, serum	1
Phosphorus	7
Potassium	89
Protein bound iodine	29
Sodium	89
Transaminase	53
Uric Acid	37
Urine for pregnancy	4

Cerebrospinal Fluid:

Mastic Curve	1

Tests Performed in the Public Health Laboratory, Halifax:

Bacteriology:

Culture for identification	2
Fungi culture	25
Gonococcus smears	88
Stools for enteric	27
Urines for enteric	3
Widal	2

Hematology:

Bone marrow	5
Hemoglobin electrophoresis	1
Immunoelectrophoresis	3
L. E. Cells	18

Pathology:

Papanicolaou smears	928

Table XIII (cont'd.)

Serology:	
Latex Fixation	20
Paul Bunnell	6
V.D.R.L.	600
Wassermann, blood	39
Wassermann, C.S.F.	0
FTA-ABS	26
V.D.R.L. quantitative	26
Tests Performed in the Red Cross Laboratory;	
Blood Group, Cross Match, Rh, for surgery	357
Maternal antibodies	2
Tests Performed in the Blanchard-Fraser Memorial Hospital Laboratory:	
Cross match for surgery	15
Blood Group and Rh	3
Transaminase	1
Special Studies:	
Aspergillosis Survey, Halifax	285
Bentonite Titre, Ottawa	197
Rifampin Study, Ottawa	2

Note:

We continue to acknowledge our indebtedness to the Laboratory Services of the Department of Public Health, and the Biochemistry Service of the Victoria General Hospital, and to the Red Cross Blood Transfusion Service, for invaluable assistance rendered throughout the year.

Table XIV SPECIAL SERVICES

	1969	1968
A. Outpatient Department:		
(1) Total visits to chest clinic	3319	3386
Ex-patients	763	
Staff	1280	
Others	1276	
(2) Number of old cases reactivated	0	4
(3) Number of newly diagnosed cases	1	0
(4) B.C.G. Clinic:		
Total vaccinations	75	62
Nurses - graduate	1	
- student	0	
- other	51	
Other hospital personnel	23	
B. Bronchoscopy Service:		
Bronchoscopic examinations	189	210
C. Physical Medicine Service:		
Electric muscle stimulation	294	0
Exercise - active and passive	6122	6760
Massage	212	362
Infra Red light therapy	2870	2861
Short Wave therapy	664	892
Steam packs	710	1121
Wax baths	571	875
Ultra sonic muscle stimulation	169	804
Intermittent Positive Pressure Breathing	7085	3647
Postural Drainage*	975	795

* Postural Drainage includes 764 with IPPB to facilitate the procedure.

D. Miscellaneous Diagnostic Procedures:		
Department of Physical Medicine:		
Audiometry	132	73
Electrocardiograms	381	356
Cardiorespiratory Laboratory:		
Blood Gas analyses	240	181
Bronchospirometry	3	3
Pulmonary Function tests	149	107

Table XIV (cont'd.)

E. Mental Health Services:	Patients	Visits
Service by psychiatrists:		
Brain Disorders	7	9
Mental Deficiency	2	2
Psychotic Disorders	10	19
Psychophysiologic Disorders	3	3
Psychoneurotic Disorders	16	40
Personality Disorders	4	7
Reactive Depression	3	5
Alcoholism	2	2
Situational Adjustment Reactions	4	4
No psychiatric diagnosis	6	6
	57	97

F Dental Services:	
Examinations	161
Prophylactic treatments	34
Extractions	222
Fillings	297
Artificial dentures (professional services only)	30

G. Special Examinations:	
Allergy tests	29
Autopsy examinations	7
Autopsy rate 29%	
Cystoscopy	11
Electrocardiograms interpreted for Point Edward Hospital	72
Electroconvulsive therapy	3
Esophagoscopy	2
Injection of joint	9
Lumbar puncture	2
Pelvic examinations	53
Piercing of ears	7
Sigmoidoscopy	2
Sternal puncture	13

Table XV SPONSORSHIP OF PATIENTS HOSPITALIZED

	1967	1968	1969
Department of National Defence - Army	0	0	)
- Navy	6	3	) 1
- Air Force	0	0	)
Department of National Health & Welfare, Medical Services:			
a) Immigration Medical Service	0	0	0
b) Indian and Northern Health Services	8	6	7
c) Sick Mariners Service	4	1	1
Department of Veterans Affairs:	14	7	14
Reciprocal Agreement:			
a) with Ontario	0	1	3
b) with New Brunswick	0	0	0
c) with Prince Edward Island	0	0	0
Other:			
a) Private shipping company	1	0	0
b) U. S. Citizen	0	1	0
Department of Public Health of Nova Scotia	480	470	589
Total	513	488	615

NOVA SCOTIA

TWENTY-FIRST ANNUAL REPORT

OF

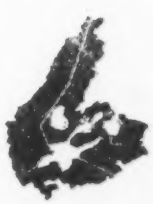
POINT EDWARD HOSPITAL

N.S. Department of Public Health

Sydney, Nova Scotia

For the Calendar Year

Ending December 31, 1969



HONOURABLE RICHARD A. DONAHOE
Minister of Public Health

Doctor J.S. Robertson
Deputy Minister

Doctor J.E. Hiltz
Administrator of Tuberculosis Control Services
(deceased March 22, 1969)

Doctor H.B. Colford
Acting Administrator of Tuberculosis Control Services
(from March 23, 1969)

MEDICAL STAFF

Medical Superintendent	Dr. D.S. Robb	
Asst. Medical Superintendent	Dr. T. Krzyski	
Consultants	Dr. D.B. Archibald	- Urology
	Dr. W. MacIsaac	- Bronchoscopy
Courtesy Consultants	Dr. H.R. Corbett	- Radiology
	Dr. E.C. McDonagh	- Psychiatry
	Dr. R. Mathieson	- Pathology
	Dr. V.M. Raz	- Orthopaedics
	Dr. H.M. Holden	- Electrocardiography

NURSING STAFF

Director of Nursing	Miss Katherine MacKenzie
Asst. Director of Nursing	Mrs Flora MacDonald
Head of Teaching Department	Mrs Winnifred Protheroe
O.R. Supervisor	Miss Helen Chiasson
Evening Supervisor	Miss Margaret Bates
Night Supervisor	Mrs Edna MacDougall
Relief Supervisor	Mrs Lenore Lawley
Head Nurses	Miss Theresa Bisson
	Mrs Irene Pierrynowski
	Mrs Elizabeth Reid

ADMINISTRATIVE AND TECHNICAL STAFF

Administrator - Medical Supt.	Dr. D.S. Robb
Chief Clerk	Mrs Margaret MacKenzie (to Nov 30/69)
	Mrs Josephine MacKinnon (from Dec 1st)
Stores Supervisor	Mrs Isobel MacPherson
Rehabilitation Supervisor	Miss Helen MacKenzie (to July 15/69)
	Mrs W. Protheroe (from July 15th)
X-ray Technician	Mrs Ada O'Callaghan
Laboratory Technician	Miss Margaret Lamond
Dietitian	Miss B. Joyce Lewis
Housekeeper	Mrs Maude Sutton
Medical Records	Miss Vivian Fraser
Maintenance Foreman	Mr. Hubert Lewis

POINT EDWARD HOSPITAL

ANNUAL REPORT -- 1969

THE FUNCTION OF POINT EDWARD HOSPITAL: The function of Point Edward Hospital has not changed during the past year. It remains a hospital operated by the Nova Scotia Department of Public Health, for the diagnosis and treatment of persons suffering from tuberculosis, for the protection of the public by the isolation of such persons during the infectious stage of their disease, and for the provision of in-patient and out-patient diagnostic services for the evaluation of cases of known or suspected tuberculosis, and of other diseases simulating tuberculosis, and also of other cases of pulmonary disease. Because of the prevalence among coal miners of lung dust diseases, it is appropriate that such a facility should be located in Industrial Cape Breton.

FACILITIES: Similarly, the facilities have remained essentially unchanged during the past year. The hospital itself is located in the former Naval Hospital, built during World War II as part of the Point Edward Naval Base, across the harbour from the city of Sydney. This area has recently become the Point Edward Industrial Park, and the hospital property is now leased from DEVCO, the Cape Breton Development Corporation. In additional to the hospital building, the property includes a Nurses' Residence, a Domestic Staff Residence, Apartments for the Medical Staff (two of the four apartments are rented to the Coast Guard College of the Department of Transport), a gate-house apartment (occupied by one of our maintencance staff), a maintenance shop, a garage, and an emergency power plant. Buildings are heated by steam

it is apparent that expenditures were held at a lower level than for the previous year, in spite of inflationary trends.

Patient-Days Up Slightly: During the calendar year 1969 the average daily census increased from 59 to 61, and the total patient-days from 21,715 to 22,263. However, this increase took place during the early months of the year, so that comparable figures for the fiscal year ending March 31, 1970 show a drop in both these indices, which is consistent with the long-term trend toward a decling in-hospital patient population. Total admissions for the calendar year dropped from 193 to 165. Of this latter figure, 125 admissions were for investigation and treatment of tuberculous patients, while 40 were for other conditions which proved on investigation to be non-tuberculous.

Statistical Tables: Statistical tables are appended. From these it can be seen that 51% of Tbc admissions were for far-advanced or moderately advanced disease, that 18 patients were admitted with anthraco-silico-tuberculosis (coal miners' lung dust disease with complicating tuberculosis), and another patient with simple or uncomplicated silicosis (the uncomplicated cases seldom are hospitalized). Most of our patients this year were from Cape Breton Island, although in other years every section of the province has been represented. Patients were admitted from all age groups, with an age range from 3 to 89 years. Slightly over 19% of admissions to the Tb service were of patients of Micmac Indian extraction, a figure disproportionate to their percentage of the total population. Slightly over 14% of patient days were paid for by Federal Agencies.

DIAGNOSTIC SERVICES: Every case, whether admitted with an established or merely a suspected diagnosis, warrants a full investigation, to establish the true nature and extent of his disease, and to identify other complicating conditions which may also require treatment or which may affect the outcome. Table 3 gives some information regarding the variety of primary diagnoses established, while tables 14 and 15 list some of the complications, tuberculous and otherwise, occurring along with the primary condition. Tables 16 and 17 list the contribution of our OR and Out-Patient Clinic services towards diagnostic procedures. Table 20 lists the work performed by our X-ray department, and Tables 18 and 19 show the work performed in our own clinical laboratory and referred out to other laboratories.

We are indeed grateful to the Pathological Institute in Halifax for the large numbers of Tb sputum cultures processed by their Bacteriological Public Health Service. We are grateful also to the Pathological Institute for sputum Cytology and for Serology reporting, and to the Sydney City Hospital Laboratory for their ever-ready help in general bacteriology and specialized biochemical procedures. Perhaps here one should insert a word of thanks to the N.S. Hospital Insurance Commission not only for their including our Point Edward Hospital Laboratory in their Laboratory Standards Control Program, but also for agreeing during the year that laboratory examinations performed by general hospital laboratories as free services to Out-Patients should be free also to residents of the province hospitalized in Tuberculosis or psychiatric hospitals, that whereas previously this hospital was billed for such services, hereafter the N.SH.I.C. should assume responsibility for payment.

Such laboratory and radiographic diagnostic procedures

are perhaps the essence of modern medicine, but of primary importance remains the skilled physician, trained to be observant, taking time to give each individual case the time and thought it requires. Perhaps the greatest hazard to good medicine today is the physician who is just too busy, too busy to give each patient the time he needs, too busy to spend the time keeping up with the rapidly advancing pace of medical knowledge.

OUT-PATIENT CHEST CLINIC: During the year there were 363 out-patient visits to our Chest Clinic. These were quite largely ex-patients, returning for follow-up or recheck examinations, but included also others referred for clinical Out-patient investigation. The Health Unit directors also run chest clinics, which are generally more centrally located than is PEH and frequently more convenient to the patient without independent means of transportation, so that we find our clientelle among those taking second-line drug therapy (who require close observation and specialized laboratory tests), patients requiring special x-ray views (such as planigraphs) to demonstrate their disease more adequately, DVA patients who have been instructed to report here, and patients who prefer to return to our OP Clinic because of the more careful check-up and immediate clinical report which we are able to give.

Because tuberculosis is "a reactivating disease", one which we can never be certain is truly healed but which at best must be called merely inactive, because it retains the power to reactivate five, then, twenty, thirty, fifty years later, because of this characteristic of the disease it remains of great importance that all who have ever been infected should be rechecked on a regular

basis, at least once yearly for the remainder of their lives, so that any reactivation which may occur may be picked up early while it is still in the easily treatable stage.

TB TREATMENT METHODS: Tuberculosis treatment methods have remained much the same during this past year, with Isoniazid, Streptomycin, and PAS remaining the "first line drugs" and ideal treatment consisting of two or three effective drugs, used in proper dosage and without interruption, for two full years following sputum conversion (the disappearance of the germs of tuberculosis from the sputum). Unfortunately there are a number of reasons why such treatment may not be practical -- the germs may develop resistance to the medication, the patient may develop unpleasant side symptoms which force interruption of the medication, or the patient may develop allergy to one or more drugs. In such circumstances we fall back on our "second-line" drugs -- Cycloserine, Ethionamide, Pyrazinamide, Thiacetazone, Isoxyl, Kanamycin and Viomycin. A major addition to our second-line regimen has been Ethambutol, which is appearing as a very useful drug, so much so that Ethambutol and the still experimental Rifamptin appear to be headed for a place on the "first-line drug" list.

The importance of long-term uninterrupted drug therapy with a combination of effective drugs cannot be overly stressed, so that other methods of treatment, such as protracted strict bed rest, is becoming a thing of the past, and even the importance of surgical resection is gradually declining. Unfortunately, drug therapy is frequently complicated in its early stages by drug intolerance, toxicity, and allergy, and the hazard of these complications is a major reason why we urge patients to enter hospital for the early months of therapy,

until the hazard of unwanted side reactions has largely passed, and until the sputum has become negative so that the patient is no longer infectious and capable of spreading the disease to others. Last year the average length of hospital stay was 138 days. The role of the hospital is to properly assess the disease, to get treatment well under weigh, to carry the patient until he is non-infectious, and then to discharge him to take the greater portion of his hospital treatment at home, leading a normal life, and then (working with the health unit director) supervise the patient through to the end of his treatment.

AFFILIATE COURSES FOR STUDENT NURSES: During the year ten four-week courses in Tuberculosis and Chest Diseases were given to a total of 107 students, from five of the six regional Hospital Schools of Nursing:

Glace Bay General Hospital	13
St. Joseph Hospital	21
Sydney City Hospital	41
St. Rita Hospital	-
St. Elizabeth Hospital	12
St. Martha Hospital	20
	107 students.

Unfortunately, with the adoption of the two-year course instead of the three year course for the training of student nurses, this affiliate training in tuberculosis has been squeezed out. No one seriously believes that the tuberculosis problem in Canada is a thing of the past, but our nurses of the future will have had even less experience, and probably less knowledge, with which to deal with a problem which is not confined to tuberculosis hospitals, but is being more frequently discovered in general hospitals.

ACCREDITATION: We are happy to report that Point Edward Hospital again received full accreditation on its tri-ennial inspection, on August 15, 1969. Point Edward Hospital was opened by the Department of Public Health on January 15, 1949, and has held a fully accredited status since its first inspection in 1951. We wish to extend to all departments of the hospital our congratulations for the job well done which has made such accreditation possible.

THE STAFF: As noted above, the total hospital staff is being gradually reduced, from 136 at the end of 1968 to 123 at the end of 1969, and this process of staff reduction is continuing whenever possible, by normal attrition.

Medical Staff: The medical staff has already been pared to the bone, with just two full time physicians, one of whom is the medical superintendent and who must of necessity spend a significant portion of his time on administrative matters. In addition, we have two regular consultants, serving us once a month or more often as required -- Doctor W. MacIsaac of Margaree Forks, consulting bronchoscopist, and Doctor D. Archibald of North Sydney, as consulting urologist. We are also grateful to Doctor H.R. Corbett and Doctor L. Aquino, radiologists at St. Rita and Sydney City Hospitals, and to Doctor R. Mathieson, Pathologist at the Sydney City Hospital, for their unfailing willingness to help, and to Doctor E.C. McDonagh, of the Cape Breton Mental Health Clinic, for psychiatric consultations. The advent of M.S.I. has made it easier to call in an occasional consultant from Sydney when required, without the worry about whether this specific consultation is for a tuberculous or non-tuberculous complication and whether the hospital or the patient should be billed

for the service. We are grateful also to Doctor H.M. Holden, medical Director of the Nova Scotia Sanatorium, for her electrocardiographic consultations, and to the medical staff of the N.S. Sanatorium who are ever willing to share ideas and advice on difficult cases.

Nursing Staff: We have been blessed with a devoted and stable Nursing Staff. During the year Miss Ida MacVicar, R.N., retired after many years of faithful service to tuberculous patients, first at St. Joseph Hospital Tb Annex and in recent years at Point Edward. Two male Certified Nursing Assistants also retired, Paul MacIntyre and Daniel MacDonald, after 20 and 17 years service to this hospital. One R.N. and one C.N.A. were transferred to the field service of the Department of Public Health, and several resigned, so that there was a net drop in nursing departmental strength.

Business Office: Late in the year Mrs Peggy MacKenzie, Chief Clerk, was transferred to a Halifax office, and her position has been ably filled by her understudy, Mrs Josephine MacKinnon. And one of our two medical stenographic staff left, because of pregnancy, and was not replaced.

Rehabilitation Service: In Mid-summer Miss Helen MacKenzie, R.N., who had taken over as Rehabilitation Director following the transfer of J. MacDougall to the Department of Public Welfare, and who had done an excellent job, resigned because of the pressure of family business. Her position has been taken over by Mrs Winnifred Protheroe, whose responsibilities in Nursing Education are petering out with the gradual elimination of the Tuberculosis Affiliation Course for student Nurses.

Maintenance Department: The maintenance department continues to do an excellent job, under the direction of Hubert Lewis, to keep the old buildings presentable and the old plant functioning properly. We are grateful here for the cooperation of the N.S. Department of Public works, who provide materials and supplies for our maintenance staff, and who contract out major jobs beyond the scope of our limited staff.

Dietary and Housekeeping: Both these departments have been gradually reduced in size: both are doing excellent work under at times trying circumstances. In both departments some of our staff are employed under Civil Service Regulations, some under Union Contract with the Canadian Brotherhood of Railway, Transport and General Workers. Our relationships with the Union have been cordial, with both sides cooperating to further the welfare of the hospital, although there have been times when the fact that not all employees were under the same regulations did present problems.

PROFESSIONAL TRAINING: Three members of the staff, Doctor D.S. Robb, Miss K. MacKenzie, R.N., and Mrs Flora McDonald, R.N., attended the annual meeting of the Canadian Tuberculosis and Respiratory Disease Association, held in St. John's, Newfoundland, late in June.

Doctor T. Krzyski attended the annual meeting of the American College of Chest Physicians in Chicago, late in October, and was granted a fellowship in the College.

Doctor Robb attended the Annual meeting of the Canadian Public Health Association in Halifax, in June.

Miss B.J. Lewis, Dietitian, and Mrs L.M. Sutton, Housekeeper, attended Resident Courses in Supervision, in Halifax, sponsored by the Civil Service Commission.

Doctor Robb and Miss K. MacKenzie, R.N., attended a one-day institute on Nursing Education, in Halifax, sponsored by the N.S.H.I.C.

Miss Helen Chiasson, R.N., attended a three day conference for Operating Room Nurses, in Halifax.

Mrs M. Caldwell, R.N., and Mrs L. Lawley, R.N., attended an Institute on Addiction, its Implication for Nursing, held in Halifax.

Those attending conventions, refresher courses, and the like, were expected to report back to the larger group. Our Medical Staff Conference met weekly, to discuss problems, policies, and to consider progress reports of each patient. The Head Nurses also met weekly, and the full graduate nursing staff met monthly in an on-going In-Service educational program.

COMMUNITY SUPPORT: One should not conclude without a word of appreciation to the many who individually and in groups supported the hospital throughout the year and brought cheer and comfort to our patients, to members of the clergy who visited so faithfully, to the various church groups, the I.O.D.E., the Eastern Star, the Canadian Legion, the St. Rita Hospital Ladies Auxilliary, the service clubs such as the Sydney Suburban West - Kinsmen Club, and to the Cape Breton Branch of the Tb and Respiratory Disease Association -- to all who by visiting individual patients, by bringing gifts, by sponsoring entertainments, did so much to make time in hospital pass more quickly and more pleasantly.

OTHER DEPARTMENTS: One does not exist in a vacuum, and at year's end we owe a word of gratitude to those in other departments of government -- the Civil Service Commission, the Purchasing Bureau, the Department of Finance and Economics, the Department of Public Works -- to all whose smooth and efficient performance of their own duties made our work run more smoothly. We have appreciated also the service given by the Department of Public Welfare to our patients. We know that they have been held back at times by lack of funds and restrictions of policy so that the measure of assistance given to our patients and their families was not always as generous as they might have wished, but real needs have been met, and by-and-large patients have been able to stay in hospital and take their treatment without undue worry about financial affairs at home.

DOCTOR J.E. HILTZ The sudden passing of Doctor J.E. Hiltz, Administrator of Tuberculosis Control Services for the Department of Public Health, as well as Medical Superintendent of the Nova Scotia Sanatorium, on March 22, 1969, was a severe loss to the Department. We at Point Edward have missed his cheery visits, his broad knowledge of tuberculosis and its problems, and his guiding hand. But the show must go on!

THE DEPARTMENT OF PUBLIC HEALTH: We owe a word of gratitude to the Health Unit Directors and their staff for their continuing cooperation as we work towards our common goal, the erradication of tuberculosis as a Public Health Problem in our land. Thanks are due also to Head Office Staff, to Mr G.E. Gregoire, Director of Office

Services, Doctor H.B. Colford, Acting Administrator of Tb Control Services, and to Doctor J.S. Robertson, for their personal friendship and professional competence, for their unfailing interest and ever-ready assistance in problems relating to the welfare of the hospital and its patients.

D.S. Robb, M.D., C.M.
Medical Superintendent

TWENTY-FIRST ANNUAL REPORT
of
POINT EDWARD HOSPITAL
N.S. Department of Public Health
Sydney, Nova Scotia
--1969--

INDEX OF STATISTICAL TABLES:

		Page
1 -	Statistical Report of Admissions and Discharges and Comparison with Five Recent Years	15
2 -	Admissions: Source of Patients	15
3 -	Admissions: Diagnosis of Patients Admitted	16
4 -	Admissions: Age and Sex of Patients admitted	17
5 -	Admissions: Residence of Patients admitted	17
6 -	Sponsorship of Hospitalized Patients	17
7 -	Discharges: Classification	18
8 -	Discharges: Admission Diagnosis of Discharged Tbc Patients	18
9 -	Discharges: Clinical Condition of Patients on Discharge	18
10 -	Discharges: Type of Discharge of Patients with Tuberculosis	19
11 -	Discharges: Marital Status	19
12 -	Discharges: Religion	19
13 -	Discharges: Tuberculostatic drugs received while in hospital	19
14 -	Discharges: Associated Tbc Complications in Tb patients	20
15 -	Discharges: Associated Non-Tbc Complications in Tb patients	20
16 -	Report of Clinic Services	21
17 -	Report of Operating Room & Department Procedures	22
18 -	Laboratory Report: Units of Work Performed	23
19 -	Laboratory Report: Work Referred to Other Laboratories	24
20 -	Report of X-ray Department	25

POINT EDWARD HOSPITAL

ANNUAL REPORT

For the Calendar Year ending December 31, 1969

TABLE 1 -- STATISTICAL REPORT OF ADMISSIONS AND DISCHARGES:

	Male	Female	Total
Patients in hospital at beginning of year	43	21	64
Total Admissions during the year	122	43	165
Total Under Care during the year	165	64	229
Total Discharges during the year	137	55	192
Patients in hospital at end of the year	28	9	37
Total Patient-days	16681	5582	22263
Average Daily Census	46	15	61
Patient-days of patients discharged or dead			26391
Average Length of Hospital Stay			138

STATISTICAL REPORT -- COMPARISON WITH 5 RECENT YEARS

	1964	1965	1966	1967	1968
Patients in hospital at beginning of year	76	88	74	70	52
Total Admissions during the year	191	217	188	173	193
Total Under care during the year	267	305	262	243	245
Total Discharges during the year	179	231	192	191	181
Patients in hospital at end of the year	88	74	70	52	64
Total Patient-days	28910	31435	29146	25129	21715
Average Daily Census	79	86	80	69	59
Patient-days of patients discharged or dead	26484	36221	35393	25217	20391
Average Length of Hospital Stay	148	158	184	131	112

TABLE 2 -- ADMISSIONS DURING THE YEAR - SOURCE OF PATIENTS

TUBERCULOUS	Male	Female	Total
First Admissions	33	8	41
Readmissions, to resume treatment	16	7	23
Readmissions, to continue treatment	2	1	3
Transfers from other Tb Hospitals	2	4	6
For review and Assessment only	42	10	52
Total	95	30	125
NON-TUBERCULOUS			
Staff	2	5	7
Other, for investigation & treatment	25	8	33
Total	27	13	40
Total Admissions	122	43	165

TABLE 3 — ADMISSIONS: DIAGNOSIS OF PATIENTS ADMITTED

TUBERCULOUS	Male	Female	Total	Percent
Primary	2	2	4	3.2
Minimal	17	4	21	16.8
Moderately Advanced	28	15	43	34.4
Far Advanced	16	6	21	16.8
Miliary	1	-	1	.8
Tuberculous Endometritis	-	1	1	.8
Tuberculous Cervical Adenitis	-	1	1	.8
Genito-urinary tuberculosis	10	2	12	9.6
Anthraco-silico-tuberculosis	18	-	18	14.4
Tbc. Pleurisy with effusion	1	-	1	.8
Tbc. Synovitis, Knee	1	-	1	.8
Tbc. Spondylitis	1	-	1	.8
	95	30	125	100.0

NON-TUBERCULOUS	Male	Female	Total
Staff:			
Bronchopneumonia	-	1	1
Influenza	2	2	4
Acute Tonsillitis	-	1	1
Pyelitis	-	1	1
Other, for investigation and treatment			
Bronchiectasis	2	-	2
Chronic bronchitis	3	2	5
Chronic bronchitis, emphysema	6	-	6
Chronic bronchitis, cor pulmonale	1	-	1
Empyema, loculated	1	-	1
Pneumonia	3	1	4
Pneumonitis, mycoplasma	-	1	1
Carcinoma - lung	3	-	3
bladder	1	-	1
ovary, with metastases	-	1	1
Hodgkin's Disease	-	1	1
Lymphoma, malignant	1	-	1
Sarcoidosis	-	1	1
Silicosis, uncomplicated	1	-	1
Lung Abscess	1	-	1
Haemoptysis, aetiology undetermined	1	-	1
suspected hormonal	-	1	1
No disease demonstrated	1	-	1
	27	13	40

Tuberculous	95	30	125
Non-tuberculous - Staff	2	5	7
- Other	25	8	33
TOTAL ADMISSIONS	122	43	165

TABLE 4 -- ADMISSIONS: AGE and SEX of PATIENTS ADMITTED

	TUBERCULOUS			NON-TUBERCULOUS			TOTAL		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-9	2	2	4	-	-	-	2	2	4
10-19	3	4	7	2	-	2	5	4	9
20-29	8	3	11	-	4	4	8	7	15
30-39	15	2	17	3	3	6	18	5	23
40-49	14	9	23	2	2	4	16	11	27
50-59	19	6	25	7	1	8	26	7	33
60-69	14	3	17	9	2	11	23	5	28
70-over	20	1	21	4	1	5	24	2	26
Total	95	30	125	27	13	40	122	43	165

TABLE 5 -- RESIDENCE OF PATIENTS ADMITTED:

Cape Breton County	112	
Inverness County	20	
Richmond County	11	
Victoria County	20	
CAPE BRETON ISLAND		163
Halifax County	1	
Kings County	1	
NOVA SCOTIA MAINLAND		2
TOTAL ADMISSIONS		165

TABLE 6 -- SPONSORSHIP OF HOSPITALIZED PATIENTS

	In hosp Jan 1/69	Admitted 1969	Discharged 1969	In Hosp Dec 31/69	Hosp Days
Dept National Health & Welfare					
(a) Immigration Medical Service	-	-	-	-	-
(b) Indian and Northern					
-- Eskasoni Agency	11	24	28	7	2923
-- Shubenacadie Agency	-	-	-	-	-
(c) Sick Mariners' Service	-	-	-	-	-
Dept of Veterans' Affairs	-	2	2	-	287
Total Federal Responsibility	11	26	30	7	3210
Province of Nova Scotia "	53	139	162	30	19053
Other Provinces - Reciprocity	-	-	-	-	-
TOTAL	64	165	192	37	22,263

TABLE 7 -- DISCHARGES DURING THE YEAR: CLASS OF PATIENT

	Male	Female	Total
Tuberculous	109	43	152
Non-Tuberculous			
Staff	2	5	7
Other	26	7	33
Total	137	55	192

TABLE 8 -- DISCHARGES: ADMISSION DIAGNOSIS OF DISCHARGED TBC PATIENTS

	Male	Female	Total	Percent
Primary	-	5	5	3.3
Minimal	19	6	25	16.4
Moderately Advanced	34	17	51	33.5
Far Advanced	21	10	31	20.4
Miliary	1	-	1	.7
Pleurisy with effusion	4	-	4	2.6
Genito-urinary Tb.	9	2	11	7.2
Tbc. Synovitis	2	-	2	1.3
Tbc. Spondylitis	1	-	1	.7
Anthraco-silico-tuberculosis	13	-	18	11.8
Tbc. Peritonitis	-	1	1	.7
Tbc. Cervical Adenitis	-	1	1	.7
Erythema Induratum	-	1	1	.7
Total	109	43	152	100.0

TABLE 9 -- DISCHARGES: CLINICAL CONDITION OF PATIENTS ON DISCHARGE

	Male	Female	Total	Percent
Pulmonary Tuberculosis:				
Inactive	40	12	52	34.2
Quiescent	30	15	45	29.6
Active - improved	15	10	25	16.4
Active - unimproved	3	-	3	2.0
Dead - from Tb or complication	1	-	1	.7
Dead - from unrelated disease	4	1	5	3.3
Extra-pulmonary Tuberculosis:				
Inactive	8	2	10	6.6
Quiescent	3	3	6	3.9
Active - improved	5	-	5	3.3
Active - unimproved	-	-	-	-
Dead	-	-	-	-
Total	109	43	152	100.0
Non-Tuberculous:				
Recovered or Improved	17	8	25	62.5
Unimproved (investigation only)	7	4	11	27.5
No disease	1	-	1	2.5
Dead	3	-	3	7.5
Total	28	12	40	100.0

TABLE-- DISCHARGES: TYPE OF DISCHARGE OF TBC PATIENTS

	Male	Female	Total	Percent
On Medical Advice	86	34	120	78.9
Transfer to N.S. Sanatorium	9	4	13	8.6
Transfer to other Tb Hospitals	1	-	1	.7
Irregular Discharges				
Against advice	8	4	12	7.9
Disciplinary	-	-	-	-
Died	5	1	6	3.9
Total	109	43	152	100.0

TABLE 11-- MARITAL STATUS * ALL DISCHARGED PATIENTS

Single	53	19	72	37.5
Married	70	22	92	47.9
Widowed	13	9	22	11.5
Separated	1	5	6	3.1
Divorced	-	-	-	-
Total	137	55	192	100.0

TABLE 12 -- RELIGION - ALL DISCHARGED PATIENTS

Roman Catholic	97	42	139	72.4
United Church of Canada	16	8	24	12.5
Salvation Army	2	-	2	1.0
Church of England	3	3	6	3.1
Presbyterian	14	1	15	7.8
Baptist	4	1	5	2.6
Pentecostal	1	-	1	.5
Total	137	55	192	99.9

TABLE 13 -- PATIENTS DISCHARGED - TUBERCULOSTATIC DRUGS USED WHILE IN HOSP.

Streptomycin	90
Isoniazide	119
PAS	83
Cycloserine	21
Ethionamide	4
Ethambutol	1
Pyrazinamide	1

TABLE 14 — ASSOCIATED TBC COMPLICATIONS IN TB PATIENTS -- DISCHARGES
(for principal Tb Diagnosis refer to Table 8)

Tbc Laryngitis	2	Tuberculous osteitis	1
Tbc Endobronchitis	1	Tb of the hip joint	1
Tbc Bronchiectasis	16	Tbc Gluteal abscess	1
Spontaneous pneumothorax	2	Tbc Chest Wall abscess	1
Tbc Pleurisy with effusion	2	Tbc Sternum	1
Tbc Empyema	1	Tbc Spondylitis	1
Tbc Lymphadenitis			
cervical	1	Pulmonary Tb., minimal inactive	1
hilar	1	Anthraco-silico-tuberculosis	1
mediastinal	2		
inguinal	1		
Tbc Peritonitis	1		
Tbc Ileitis	1		
Tb of the caecum	1		

TABLE 15 -- PATIENTS DISCHARGED - ASSOCIATED NON-TBC COMPLICATIONS
(for principal Tb Diagnosis refer to Table 8)

Respiratory System:		E.E.N.T.	
Atelectasis	1	Blindness	1
Bronchitis	6	Carcinoma of lip	1
Bronchiectasis	3	Carcinoma of nose	1
Empyema	1	Deafness	1
Emphysema, compensatory	9	Perforated nasal septum	1
obstructive	5		
Pneumonia	10	Nervous System:	
Pneumothorax, spontaneous	1	Addiction, drug	2
traumatic	1	Alcoholism	8
Pulmonary fibrosis	2	Alcoholic Neuritis	1
radiation fibrosis	2	Anxiety Neurosis	1
Influenza	2	Depressive Reaction	2
Silicosis	2	Epilepsy	7
Suspected anthracosilicosis	3	" suspected	1
Post op pleural space		Hypochondriasis	2
infection	1	Inadequate personality	1
		Mental Retardation	5
Bones and Joints:		Mongolism	1
Arthritis, rheumatoid	2	Schizoid personality	1
Disc Syndrome	1	Schizophrenic reaction	5
Spondylolisthesis	1		
Osteoarthritis	4	Systemic:	
Osteomyelitis	1	Drug allergy - Isoniazid	2
Periarticular fibrositis	1	PAS	6
Flexion contracture knees	1	Penicillin	1
Fracture of rib	1	Streptomycin	1
		Chicken Pox	3
Diseases of the skin:		Lues, latent	2
Acne vulgaris	1		
Eczema pruriginosium	1		
Neurofibromatosis	1		
Varicose dermatitis	1		

CONTINUED ON NEXT PAGE .....

TABLE 15 Continued -- ASSOCIATED NON-TBC COMPLICATIONS IN DISCHARGED TB PATIENTS

Cardiovascular System:	
Atherosclerosis	
Generalized	5
Cerebral with hemiplegia	2
Coronary thrombosis	1
Myocardial infarction	5
Heart Disease	9
Hypertensive Heart disease	1
Essential Hypertension	3
Cor Pulmonale	1
Susp C.V. disease with early cor pulmonale	1
Right ventricular strain	1
Bundle branch block	1
Thrombophlebitis	2
Varicose Veins	1
Bone marrow depression	1
Gastrointestinal System:	
Cholelithiasis	1
Cholecystitis	2
Cirrhosis	1
Diverticulosis	1
Gastritis, alcoholic	1
Helminthiasis	3
Hernia, inguinal	3
Hernia, ventral incisional	2
Hernia, hiatus	1
Pyorrhoea	1
Ulcer, duodenal	2
Ulcer, gastric	6
Genitourinary System:	
Adenocarcinoma of prostate	1
Carcinoma in situ, cervix	1
Carcinoma of renal pelvis	1
Chronic cystitis	2
Chronic urethritis	1
Chronic prostatitis	1
Benign prostatic hypertrophy	4
Hydronephrosis	1
Cystocoele	1
Papilloma of bladder	1
Perineal abscess	1
Extraperitoneal abscess	1
Epididymitis	1
Uremia	1
Urethral stricture	2
Ureteral stricture	1
Urethroperineal fistula	1
Vaginitis	2
Dysmenorrhoea	1
Hormonal System:	
Diabetes Mellitus	4
Pituitary insufficiency	1

TABLE 16 -- REPORT OF CLINIC SERVICES

		Patients	Visits	OP Chest x-rays
OUT-PATIENT CHEST CLINIC				
D.V.A.	- Patients	112		
	- Visits		137	363
OTHER	- Patients	95		
	- Visits		197	
STAFF CLINIC				
	- Patients	70		
	- Visits		174	
	- Chest x-rays			549
	- Tuberculin Tests given		39	

TABLE 17 -- REPORT OF OPERATING ROOM & DEPARTMENT PROCEDURES

BY OUR CONSULTANTS:	Major	Minor	Other
E.E.N.T. PROCEDURES (Dr. W. MacIsaac)			
Bronchoscopic examinations		16	
E.E.N.T. exams, consultations, etc			8
UROLOGY PROCEDURES (Dr. D.B. Archibald)			
Nephrectomy	Nil		
Cystoscopics		17	
Urethral Dilatation		4	
Trans-urethral prostatic resection		1	
Other examinations and consultations			4
Aspiration of Scrotal Abscess		1	
DENTAL (Dr. P. Simon)		1	
BY OUR FULL-TIME MEDICAL STAFF:			
Biopsy, scalene node		4	
pleural		1	
Aspirations, chest		136	
other		3	
Lumbar puncture		4	
Repair of lacerations, etc		4	
Plaster casts		3	
Exam, sigmoidoscopic and proctoscopic			1
E.E.N.T			17
Caloric Testing			2
NURSING PROCEDURES:			
Dressings, etc			48
Ear syringe, etc			23
Injections			33
Postural drainage			7
ANAESTHESIA			
General		0	
Spinal		1	
Local		154	
Topical		49	

TABLE 13 -- LABORATORY REPORT: UNITS OF WORK PERFORMED

	Total Exams	Unit Value	In-patient Units	Out-patient Units	Total Units
HAEMATOLOGY:					
Bleeding Time	1	1	1		1
Clotting Time	2	2	4		4
Differential	1099	2	1572	626	2198
Haematocrit	1082	1	770	312	1082
Haemoglobin	1106	1	732	324	1106
Platelet Count	2	3	6	-	6
Prothrombin Time	13	2	26	-	26
Red cell count	3	1	3	-	3
Sedimentation Rate	1082	1	770	312	1082
White cell count	1108	1	792	316	1108
Total			4726	1890	6616
URINALYSIS:					
Routine	668	2	1318	18	1336
Single constituents	5	1	3	2	5
Uroscreen	2	1	2	-	2
Total			1323	20	1343
BIOCHEMISTRY:					
Bilirubin (direct + total)	7	4	24	4	28
Glucose	289	2	536	42	578
Glucose Tolerance	7	10	70	-	70
Icterus Index	4	1	2	2	4
Non-Protein Nitrogen	249	4	984	12	996
Acid phosphatase	2	6	12	-	12
Alkaline phosphatase	389	6	2214	120	2334
Protein, total & A/G ratio	7	6	36	6	42
Transaminase	5	5	25	-	25
Urea Nitrogen	251	4	988	16	1004
Occult Blood	15	1	15	-	15
Sulkowich Test	1	1	1	-	1
CSF - Cell count	4	1	4	-	4
Chloride	4	3	12	-	12
Protein	4	2	8	-	8
Sugar	4	2	8	-	8
Total			4939	202	5141
BACTERIOLOGY:					
Sputum: Direct smear for T.B.	135	3	402	3	405
Concentration - T.B.	578	4	2312	-	2312
Other: Direct smear for T.B.	2	4	8	-	8
Miscellaneous slides	5	2	10	-	10
Total			2732	3	2735
PROCUREMENT & HANDLING OF SPECIMENS			1720	385	2105
TOTAL UNITS OF WORK PERFORMED			15440	2500	17940

TABLE 19 -- LABORATORY REPORT: WORK REFERRED TO OTHER LABORATORIES

	Total Exams	Unit Value	In-Patient Units	Out-patient Units	Total Units
HAEMATOLOGY:					
Bone marrow film	2	7	14	-	14
Blood film	2	2	4	-	4
Differential	1	2	2	-	2
Haematocrit	1	1	1	-	1
Haemoglobin	1	1	1	-	1
Platelet count	1	3	3	-	3
White cell count	1	1	1	-	1
Total			26	-	26
BIOCHEMISTRY:					
Urine: Total Estrogens	2	30	60	-	60
Corticoids	1	15	15	-	15
Amino acid	1	3	3	-	3
Calcium	70	4	276	4	280
Cephalin Cholesterol Flocc	2	2	4	-	4
Chloride	69	3	201	6	207
CO_2 content (Astrup)	29	8	224	8	232
Phosphorus	69	4	268	8	276
Potassium	69	3	201	6	207
Protein Electrophoresis	2	6	12	-	12
Sodium	69	3	201	6	207
Thyroxine	9	10	50	40	90
Lactic Dehydrogenase	1	5	5	-	5
17-Ketosteroids	1	12	12	-	12
Thymol Turbidity	2	2	4	-	4
Transaminase	5	5	25	-	25
Uric Acid	3	3	6	3	9
CSF: Mastic Curve	3	2	6	-	6
Total			1573	81	1654
BACTERIOLOGY:					
T.B. Cultures	2812	6	16872	-	16872
General cultures - sputum	133	6	786	12	798
urine	136	6	816	-	816
other	62	6	372	-	372
Fungus cultures	6	7	42	-	42
Sensitivities	122	4	488	-	488
Ova concentration and slide	2	4	8	-	8
Total			19384	12	19396
HISTOPATHOLOGY	10	8	80	-	80
CYTOLOGY	178	5	890	-	890
BLOOD BANK			8	-	8
SEROLOGY			238	-	238
TOTAL UNITS OF WORK REFERRED OUT			22199	93	22292

AUTOPSIES: Hospital deaths - 9. Autopsies - 4. Autopsy Rate - 44.4%

TABLE 20 -- REPORT OF X-RAY DEPARTMENT

	In-patient Exams	Out-patient Exams	Staff Exams	Total Exams	T.M. Units	A.M. Units	
Chest, single	479	344	548	1371	2742	2742	
multiple	194	19	1	214	642	428	
planigraphic series	94	9	-	103	515	515	
Bronchogram, unilateral	3	-	-	3	12	12	
bilateral	4	-	-	4	20	24	
Abdomen	8	-	-	8	16	16	
Gall Bladder	2	-	-	2	8	6	
Pyelogram, intravenous	6	-	-	6	36	18	
retrograde	15	-	-	15	60	30	
Bones and joints:							
Ribs and shoulders	1	-	-	1	3	2	
Skull, sinuses	3	-	1	4	12	12	
Hips and pelvis	5	-	-	5	10	10	
Spine	26	4	-	30	120	90	
Extremities	13	3	2	18	36	36	
Barium Swallow	1	-	-	1	2	2	
Totals	854	379	552	1785	4234	3943	**
Electrocardiogram	78	2	1	81	324	*	
B.M.R.	1	-	-	1	4		
Pulmonary Function	21	1	-	22	105		

* Electrocardiograms were referred to Dr. H.M. Holden

** X-rays interpreted by our own medical staff, with occasional radiographic consultation with Dr. H.R. Corbett or Dr. L.A. Aquino